

# FINANCIAL HIGHLIGHTS

	1978	1977	Increase (Decrease)
Operating Revenues	\$3,433,232,000	\$3,500,781,000	(2)%
Net Income	\$ 401,584,000	\$ 356,298,000	13%
Earnings Available for Common	\$ 318,247,000	\$ 282,395,000	13%
Earnings Per Common Share	\$3.20	\$3.15	2%
Declared Dividends Per Common Share	\$2.16	\$2.00	8%
Total Assets	\$8,502,072,000	\$7,998,013,000	6%
Capital Expenditures	\$ 807,996,000	\$ 690,324,000	17%
Sales of Electricity to Customers (KWH)	56,135,915,000	58,077,027,000	(3)%
Sales of Gas to Customers (MCF)	513,139,000	557,889,000	(8)%
Total Customers	6,019,135	5,984,170	1%
Number of Stockholders	384,133	635,913	7%
Number of Employees	26,445	25,537	4%

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1978-1979

## **TO OUR STOCKHOLDERS**

We are pleased to report that the improvement in the Company's financial results during the previous two years continued during 1978. Earnings per share of common stock were \$3.20, up 5 cents from 1977 earnings.

The dividend was raised in January to 58 cents per share effective with the April 16, 1979 payment. This was an increase of 4 cents per share over the quarterly rate in effect since the first quarter of last year. The new annual dividend rate becomes \$2.32 per share.

The dividend increase reflects the increased investment by common stockholders through retained earnings, the improving regulatory climate in California during the past year and the prospect of a more stable and progressively improving earnings pattern in the future.

### **Improvements in Rate Regulation**

The California Public Utilities Commission (CPUC) has continued to recognize that the needs of our customers for reliable and reasonably priced energy can best be satisfied if PG&E remains a financially strong company.

The CPUC's plan to reduce regulatory lag in general rate cases was initiated in the Company's last case, but was not fully

effective because of a delayed start. However, our now-pending case for a general increase in rates is on schedule, and if decided by the end of the year, as anticipated, should enable the Company to earn in 1980 the full authorized rate of return. Moreover, the Commission has recognized in two recent decisions involving other companies that returns on equity higher than that last allowed PG&E are warranted in today's economic climate.

In addition to expediting general rate cases, the CPUC adopted last year a special procedure to stabilize gas revenues during the current period of reduced industrial sales, and has announced that it will consider making timely and appropriate rate adjustments when major new facilities, such as our Diablo Canyon nuclear units, are placed in service.

### **Growth Continues**

Your Company will continue its efforts to build the new power plants necessary to maintain the reliable service which has been a PG&E hallmark.

The reliability was highlighted when, last summer, we met a record peak demand in our service area. Current forecasts indicate that peak and total energy demands will continue to grow for the next several years at about three and one-half percent

a year. This contrasts with growth rates of from five to seven percent in past decades.

These forecasts take into account the increasing effectiveness of our conservation and peak-shaving programs and the expected addition of nearly one million more electric customers over the next 15 years.

This more modest growth in electric demand has the positive effect of reducing our financing requirements for new generating facilities. Even with reduced growth, however, substantial additions to electric generating capacity are needed to meet our customers' increasing electric needs.

Similarly, we must procure substantial new gas supplies and build major new gas delivery facilities to meet the future needs of our gas customers.

### **Resource Development Plans**

For electric supply, the immediate centerpiece is our Diablo Canyon nuclear plant, the first unit of which we expect to be operational in 1979.

Also in 1979, three new geothermal units should become operational, and other units will follow. By 1984, The Geysers could supply as much as eight percent of our total generating capability.

Major additions planned for the mid and late 1980s

include a large two-unit coal-fired steam plant and three oil-fired combined-cycle units.

Our 1.1 million-kilowatt Helms Creek pumped storage hydroelectric plant is now under construction and is scheduled for operation in 1981. A new conventional hydro plant of 151,000 kilowatts and capacity increases totaling 5,000 kilowatts at four existing hydro facilities are planned or under construction.

Cogeneration projects (joint projects with other industries for developing new generation on a small but economic scale) round out our electric resource plans for the next decade.

For gas supply, our resource development plan deals with declining supplies from California and the Southwestern United States, and the uncertainty of obtaining more gas from Canada (now the source of about 48 percent of our gas).

Of immediate priority are plans to import liquefied natural gas from South Alaska and Indonesia, and to bring gas to California by pipeline from the North Slope of Alaska and from the Rocky Mountain area.

Two new gas supplies of modest potential are already being tapped in Company pilot programs for extraction of methane from a sanitary landfill and from manure at a cattle feedlot.

Whether these resource development plans which we have formulated to meet the energy needs of our customers can be timely implemented, however, remains of grave concern to us. It will require the commitment of the several federal, state and local regulatory agencies having jurisdiction over various aspects of these plans to move expeditiously each energy project through the numerous interrelated administrative proceedings that must precede final authorization.

#### **Research and Development**

The Company is participating through the Electric Power Research Institute and the Gas Research Institute in comprehensive research and development programs seeking improvements in technology in virtually every aspect of electric generation, transmission and distribution and in gas production and transmission. The projects are as varied as the breeder reactor, solar generation, wind power, coal gasification, and remote control of customer loads. The Company is also engaged in other research projects, some with other companies and governmental agencies, some by itself.

While we are encouraged by our progress, our plans for reliable new

sources of gas and electricity must recognize what technology can do today—and what it cannot do. That is why the bulk of our resource development plans for the years immediately ahead centers upon proven technologies.

#### **Our Second Century**

You have noticed that our Annual Report reaches back a full century. Without doubt, our electric beginnings 100 years ago set a course that helped build the State of California, enrich the lives of millions and give untold numbers of investor-owners a fair reward for their faith in what has become the Pacific Gas and Electric Company.

As we begin our second electric century and, incidentally, our 127th year in the gas business, your Company expects to continue to make an equally important and constructive contribution to the future of California.



John F. Bonner



Richard H. Peterson

*John F. Bonner*

President and  
Chief Executive Officer

*Richard H. Peterson*

Chairman of the  
Board of Directors

For the Board of Directors  
February 23, 1979

# NEW IDEAS IN ELECTRIC ENERGY SINCE 1879

Miners were still washing gold from the foothills of California when electric history was made in San Francisco 100 years ago.

A shed housing two small dynamos became the nation's first central generating station to sell electricity to the public.

Arc lamps soon challenged the flickering gas lamps introduced more than a quarter-century before by a PG&E predecessor, the San Francisco Gas Company.

A young money broker, George H. Roe, and a few farsighted investors launched the California Electric Light Company on June 30, 1879. Their small generating plant began operating in September near 4th and Market Streets in San Francisco, a month before Thomas Edison perfected his incandescent lamp.

From this beginning grew the far-flung PG&E electric system of today. This system serves more than nine million people in an area larger than the six New England states plus New Jersey, Delaware and Maryland.

The Company grew into the present single organization through mergers of some 500 utilities and through never-ending construction to harness new sources of energy.

In the early days, coal brought from Australia by windjammers was both a source of manufactured gas for lighting and a fuel for the boilers feeding those early dynamos. Then came the era of waterpower and our growing chain of hydroelectric plants.

As the 19th Century passed into the 20th, oil and natural gas, then geothermal steam and nuclear fuel became important energy sources for our continually expanding system.

Throughout, the Company consistently followed a policy of building for the future and planning for new facilities and capacity well ahead of immediate needs.

It also rode the wave of advanced technology, finding better ways to generate electricity, to transmit it long distances and to distribute it.

And so today, on the threshold of our second 100 years as a supplier of electricity, a sense of destiny persists—a destiny linked to continued growth through foresight, technology, investor confidence, and the skill and dedication of PG&E people.

Highlights of this saga—past, present and future—are found here and on the pages to follow.

**1879**

A PG&E predecessor, the California Electric Light Company, opened the first central generating station in the nation. The scene was San Francisco, three years before Thomas Edison's famous Pearl Street Station went into service in New York City.

**1889**

Folsom Powerhouse, first of PG&E's hydroelectric plants, brought about a major achievement in long distance transmission when its power was sent a then-record distance of 22 miles to light the city of Sacramento.

# HYDRO

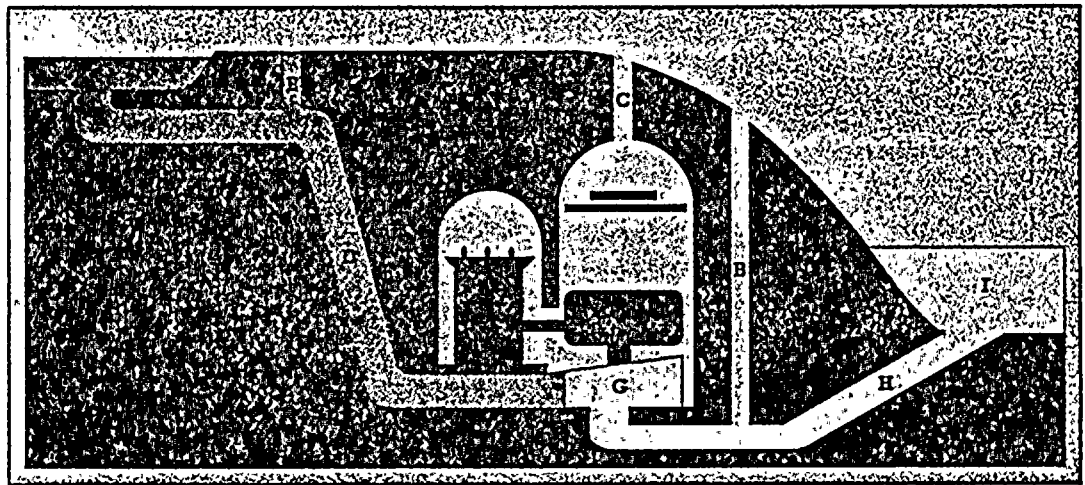
During the spring runoff, when snowpacks melt and swell rivers, lakes and reservoirs, the Company's hydroelectric plants may run day and night to provide base load for the system.

Throughout the year, these plants are operated so as to minimize the need to burn expensive fossil fuels in our thermal plants.

The geographic spread of 64 hydro plants in the PG&E area system, situated along some 17 separate river systems, helps to protect the reliability of the system.

**Pumped Storage Hydro**  
Penstock carries falling water from the upper reservoir into the underground powerhouse where it spins turbine-generators, then flows into the lower reservoir. Later, during off-peak periods, the turbines are reversed and the water is pumped back to the upper reservoir—ready for the cycle to be repeated.

- A Upper Reservoir
- B Surge Chambers
- C Access Shaft
- D Penstock
- E Transformer
- F Generator-Motor
- G Pump-Turbine
- H Suction and Discharge Tunnel
- I Lower Reservoir



The magnet of centralized operations, which had drawn together small utilities in California into increasingly larger, more efficient systems, reached a milestone—the merger of two large Northern California utilities and the incorporation of the Pacific Gas and Electric Company.



Major interconnections between separate electric systems began in the PG&E service area. This led to today's vast network of transmission lines connecting 59 utilities in 14 Western States and British Columbia.

# FOSSIL

The fiery interior of a boiler typifies PG&E's fossil fuel sources of electric generation.

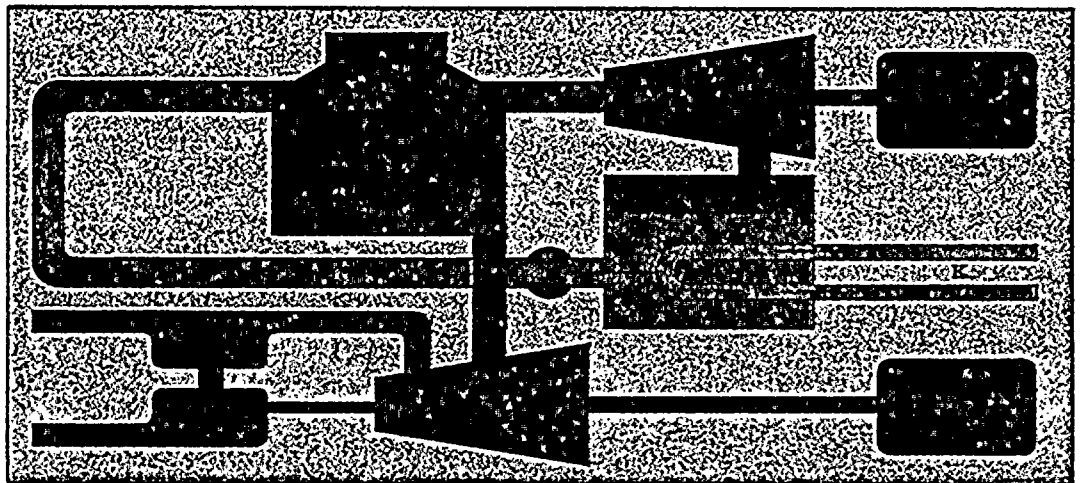
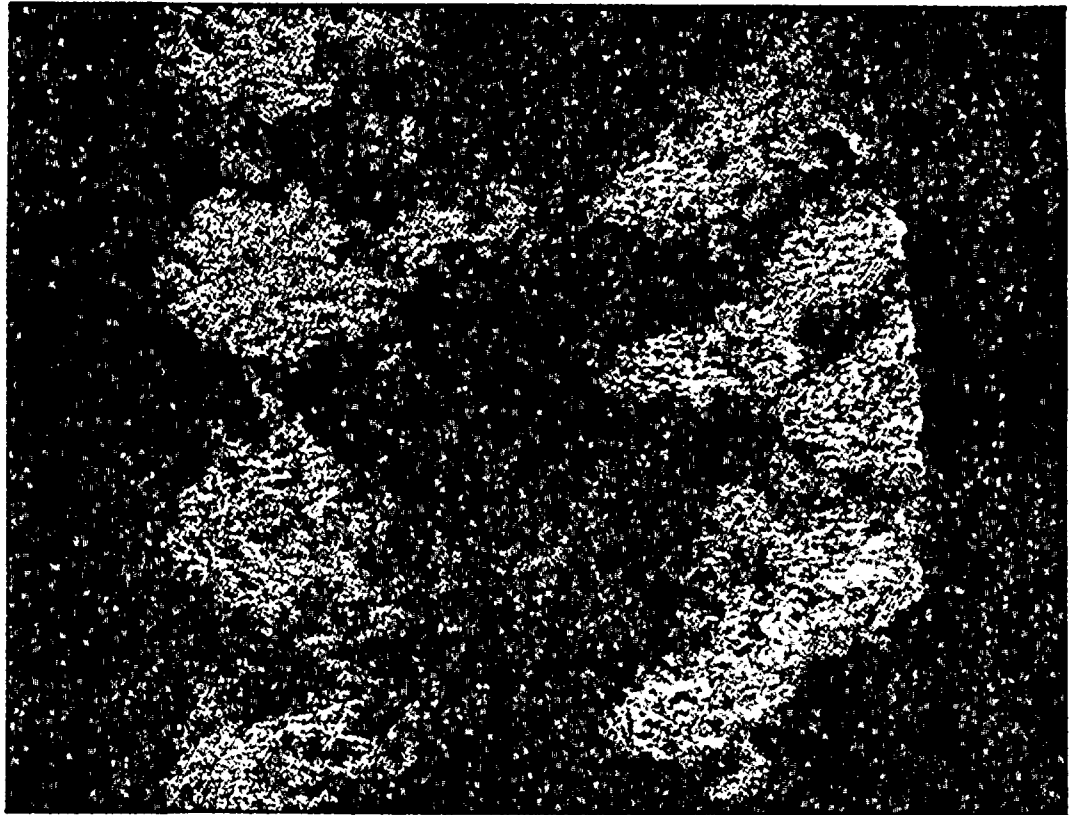
Electricity generated by burning low-sulfur oil and natural gas accounted for 45 percent of our system output in 1978. With supplies of both fuels limited and costly, the Company is moving toward the use of nuclear fuel and coal as the primary sources of energy for its future base-load plants.

Combined-cycle power plants, too, are planned as yet another resource. This new breed of generating unit, burning low-sulfur distillate fuel oil, is more efficient and economical than conventional oil-fired steam-electric plants.

## Combined-Cycle Generation

Exhaust heat from combustion-turbine generating units goes on to produce steam for a steam-driven generating unit to produce additional electricity and increase efficiency.

- A Fuel
- B Combustion Chamber
- C Air
- D Air Compressor
- E Gas Turbine
- F Generator
- G Exhaust Gas
- H Stack Gas
- I Steam
- J Steam Turbine
- K Cooling Water
- L Condenser
- M Pump
- N Condensate



**1938**

Construction began on three steam power plants, each alongside an oil refinery. This novel plan for cogeneration led to conserving fuel and lower production costs through the exchange of fuel, steam, water and power between the refineries and the power plants.

**1941**

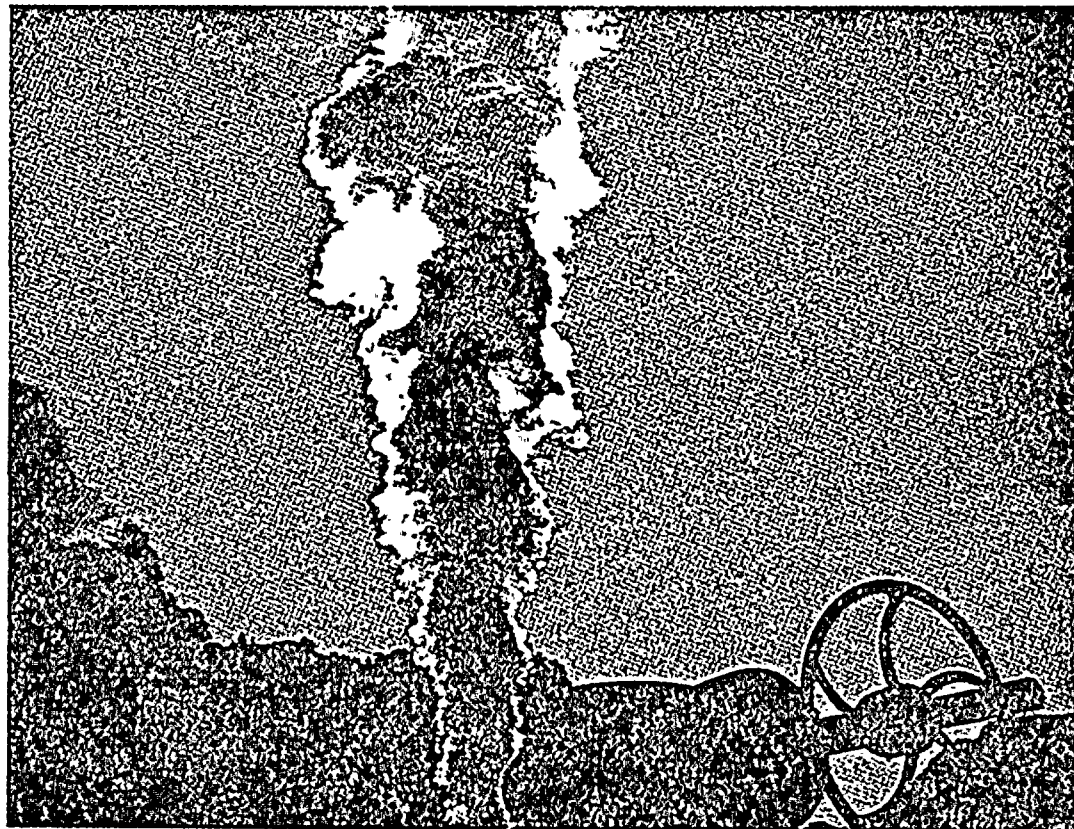
After Pearl Harbor, PG&E geared its construction program to provide vital energy to expanding defense industries and the armed forces. During wartime, the Company was able to keep essential services flowing to the civilian population as well.

# GEO THERMAL

PG&E's Geysers Power Plant is the world's largest geothermal electric generating facility and the only such plant operating commercially in the United States.

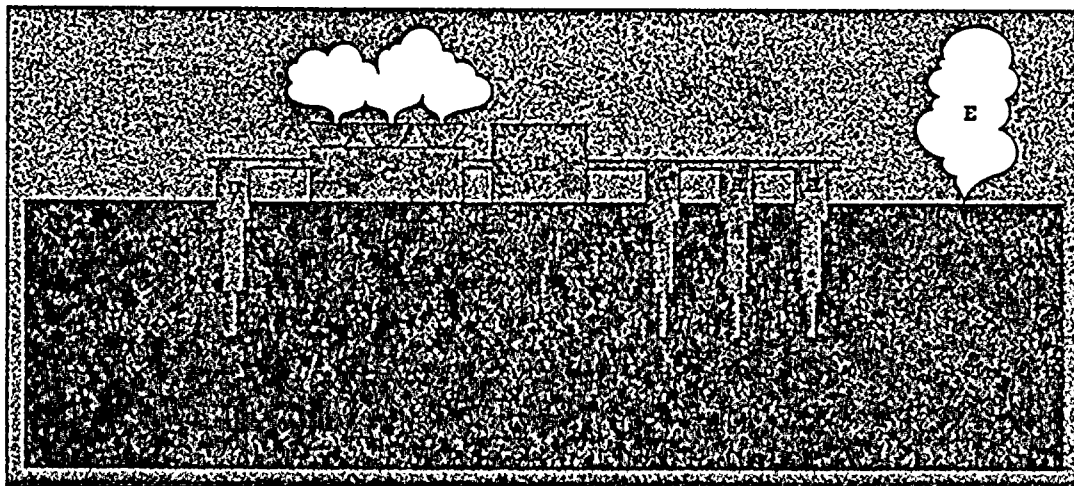
Here, some 200 wells, 3,000 to 10,000 feet deep, bring natural steam from underground reservoirs to 12 turbine-generators whose electrical output is enough to meet the needs of a half million residential customers.

Expansion under way at The Geysers will steadily increase our geothermal generating capability.



**Geothermal Generation**  
Magma, molten rock deep within the earth, heats solid rock above it. When water from underground sources contacts this hot rock it turns to steam. Steam piped to the surface through wells drives the turbine-generators.

- A Steam Wells
- B Turbine-Generator Building
- C Cooling Tower
- D Reinjection Well
- E Hot Spring or Fumarole
- F Impermeable Cap Rock
- G Geothermal Steam Zone
- H Impermeable Rock
- I Magma: Heat Source
- J Steam Zone Boundary



**1951**

Post World War II years brought an upsurge of population, industry and agriculture in California. To meet this growth, the Company launched the greatest construction program ever undertaken by any gas and electric utility in the United States up to that time.

**1955**

PG&E received License Number One from the U.S. Atomic Energy Commission for the Vallecitos Nuclear Power Plant, the first all-privately financed nuclear generating station in the world.

# NUCLEAR

Diablo Canyon Nuclear Power Plant will be the third plant using uranium fuel to generate electricity in the Company's 21 years of experience with such plants.

Diablo is located on a 735-acre site about 12 miles southwest of San Luis Obispo.

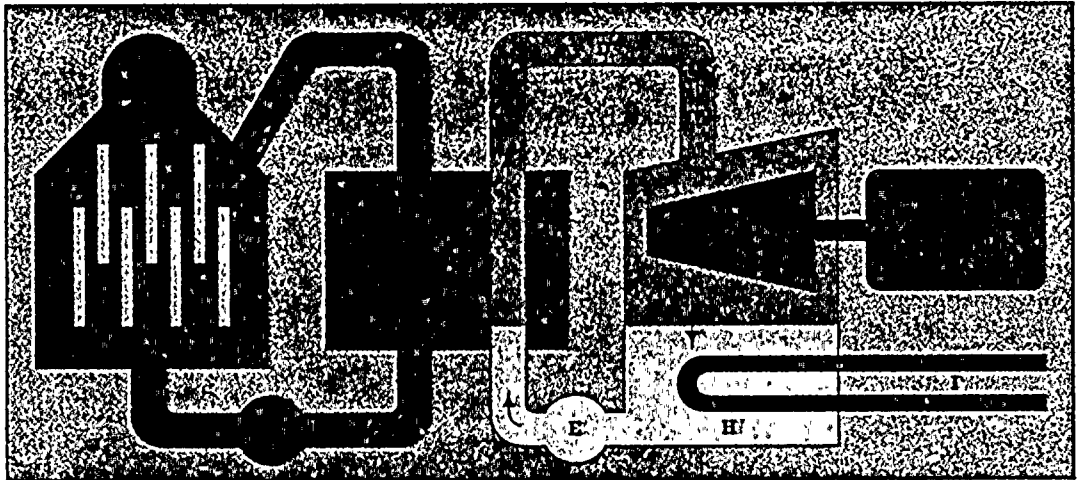
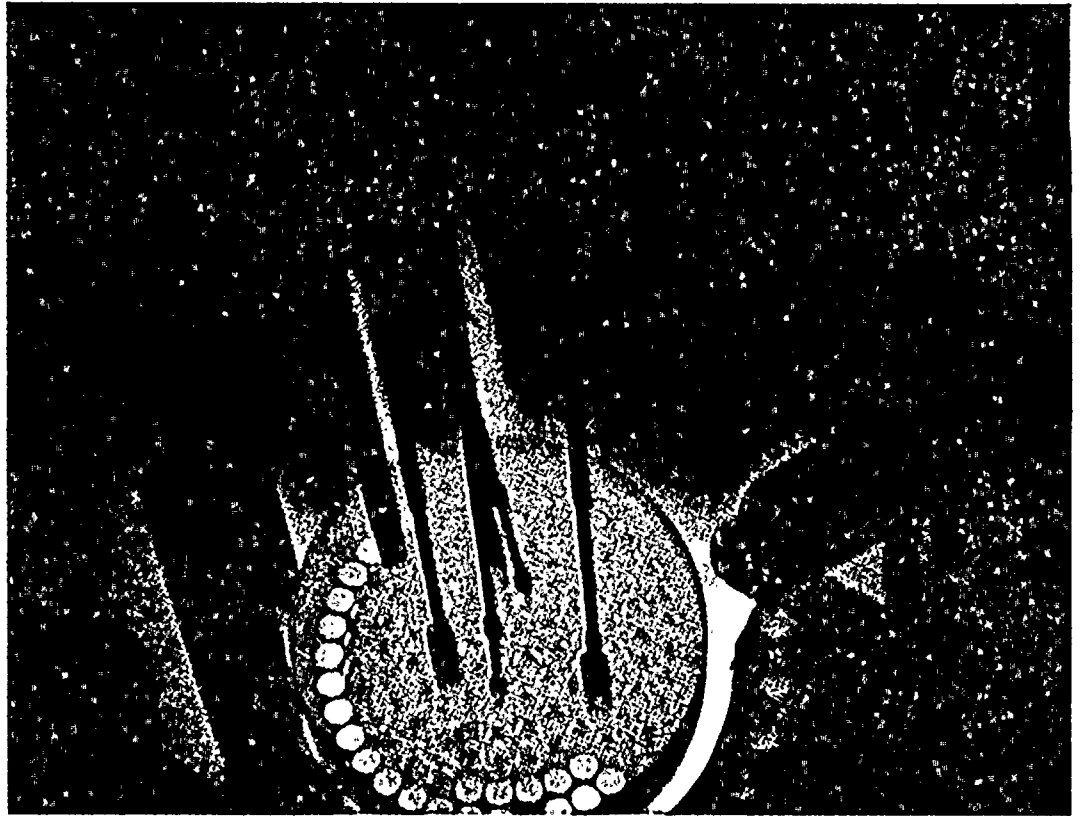
The combined generation capacity of the plant's two units will represent more than one-sixth of the Company's total capability. These units will produce an amount of energy that would require the burning of 20 million barrels of oil a year in a fossil fuel power plant.

In planning for the future, we see additional nuclear power as a proven, environmentally superior and economic way to meet growing electric demand on the PG&E system.

## Nuclear Power

Water heated by fissioning atoms in the reactor vessel passes through a heat exchanger. Here, it converts a separate stream of water to steam to turn the turbine-generator.

- A Reactor: Core and Rods
- B Pressurized Water
- C Steam Generator
- D Steam Line
- E Pump
- F Turbine
- G Generator
- H Condenser
- I Cooling Water



**1960**

The Company's Geysers Power Plant was the first on this continent to use naturally-occurring geothermal steam for commercial electric power generation.

**1953**

Our Humboldt Bay Nuclear Power Plant became one of the first nuclear units anywhere in the world to produce power at a cost comparable to a conventional steam plant.



## SOLAR

Their brilliant service in spacecraft gives photovoltaic electric systems the promise of some day providing a clean new source of electricity.

By some estimates, a significant portion of U.S. electric energy needs by the year 2020 could come from solar cells and other means of converting sunlight to electric power.

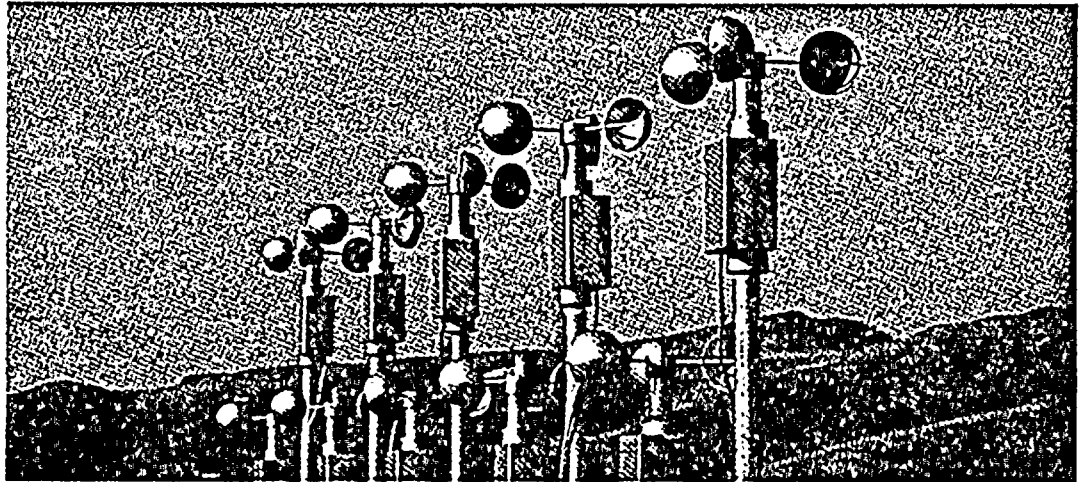
In addition to evaluating new and existing technologies for heating and cooling, the Company is cooperating in the design of a photovoltaic solar electric generating facility near our Research Center at San Ramon.



## WIND

Sensors shown here are part of PG&E research to measure wind speed at selected sites in Northern California.

Wind energy may some day become an economic and practical supplemental source of electricity.



**1959**

The Pacific Northwest-Southwest Inter tie, the largest electric transmission in the country, linked hydro plants in the Columbia River basin with the PG&E system and other utilities in California and the Southwest.

**1970**

One of the nation's most advanced Energy Control Centers was completed. The Company's electric operations, gas operations, communications and meteorological activities were combined into one facility which uses the latest in information gathering and control technology.

# CONSERVATION

PG&E will spend more than \$50 million in 1979 to help customers cut their energy costs through conservation.

In promoting conservation, we are helping both to slow the urgency for costly new facilities and to lessen our dependence on foreign energy sources.

Assisting people to insulate their homes is only one of more than 50 conservation programs now under way involving residential, commercial, industrial and agricultural customers, local governments and schools.



PG&E sponsors an Energy Conservation Home program which offers incentives to developers who incorporate energy-saving devices and methods into new homes. Such homes can save buyers up to 25 percent in energy use over homes built to minimum state standards. By 1980, more than one-third of all new homes in our service area will include these conservation features.



**1980**

Here begins a decade where important new sources of electric generation will be added to our system. A coal-fired steam plant, three combined-cycle units and increased geothermal and hydro capability head the list of projects planned for the 1980s.

**2000**

Electricity generated by solar power and nuclear fusion may be on the threshold of providing clean, inexhaustible supplies of electricity to supplement and possibly replace fossil fuels such as coal, oil and gas.

# SYSTEMS MAP

In this vast and productive region, with its unexcelled climatic advantages, forest and mineral resources and opportunities for further agricultural and industrial development, PG&E supplies gas and electricity to an ever-growing population.

Twelve thermal stations, a geothermal complex of 12 generating units and 64 hydroelectric plants send power through 13,400 miles of transmission lines and into an 85,000-mile distribution system. Two major interconnections link our system to the Pacific Northwest and the southwestern United States.

Natural gas from Canada and the Southwest, along with gas purchased from California producers, flows through the Company's 4,700 miles of transmission lines which, in turn, are connected to more than 28,000 miles of gas distribution lines.



- PG&E Service Area
- Electric Generating Plants**
  - Hydro
  - Fossil
  - Geothermal
  - Nuclear
- Electric Intertie Systems**
  - PG&E
  - Other
- Gas Intertie Systems**
  - PG&E
  - PG&E Affiliates
  - Other

# OPERATION REVIEW

## Finance and Rates

Net income increased approximately 13 percent in 1978 to \$402 million. However, because of a greater number of common shares outstanding earnings per share grew only 2 percent or 5 cents per share, to \$3.20.

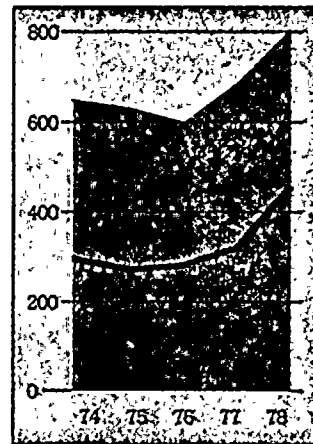
Of greater significance than the absolute increase in earnings were the reasons underlying the improvement, for they augur well for the future.

First, the California Public Utilities Commission (CPUC) on September 6 granted PG&E a general rate increase of \$138.5 million based on a 1978 test year. This was in addition to the \$71.2 million partial general increase in electric rates, which had been in effect since January 1.

This was the first rate case processed under the CPUC's plan to reduce regulatory lag and its final decision came within the 12 months allowed by the plan.

We now are confident that rate increase applications can be handled in an expeditious manner and that, with proper scheduling, increases can be placed in effect by the start of the test year. The CPUC's plan is an important step in affording the Company the opportunity to earn the return found fair and reasonable. It should further improve our earnings in the years

Capital Expenditures  
(Millions of Dollars)



■ Internal Funds

immediately ahead.

Second, in May the CPUC adopted a procedure known as a Supply Adjustment Mechanism (SAM), which adjusts gas rates semiannually to stabilize revenues despite fluctuations in sales.

As a result, the adverse impact on earnings experienced during the first five months of 1978 because of declining gas sales will not be repeated in the future.

## Future Rate Increases Needed

To offset the higher costs of capital, increased wage expenses and the need to fund the Company's continually expanding construction and energy conservation programs, we have applied for addi-

tional rate increases of \$343.8 million beginning in January 1980.

Our request calls for \$127.4 million annually in higher gas rates and \$216.4 million more in electric rates.

The amounts requested are based on a 1980 test year with a 10.71 percent return on rate base and a 15 percent return on equity.

Hearings are scheduled to commence in March and, in accordance with the CPUC's plan to reduce regulatory lag, a decision is expected before the end of 1979.

## Other Rate Developments

The remaining significant categories of cost are associated with purchased natural gas, fuels used for electric generation and purchased power.

During 1978, the CPUC authorized an increase of \$90.3 million annually in gas rates to offset higher prices charged the Company by suppliers of natural gas.

In November, PG&E applied to increase natural gas rates by an additional \$221.6 million annually. This filing will offset higher prices from suppliers, adjust for lower sales, and will cover financing charges for gas exploration projects.

After two years of drought in 1976 and 1977, vastly improved hydroelectric conditions during

1978 reduced fuel costs for electric generation. As a result, it was possible to reduce the fuel-related component of electric rates by \$472.2 million annually during 1978 and by an additional \$143.6 million annually in February 1979.

During the year, the Company established a balancing account to insure that property tax savings resulting from the Jarvis-Gann (Proposition 13) initiative are passed on to our customers. It also will insure recovery through rates of any offsetting increase in state and local taxes.

The immediate effect of this balancing account will be a decrease in rates of \$61.9 million over a 16-month period ending December 31, 1979.

**Electric Operations**

On August 8, high summer temperatures sent the system peak demand to a record high of nearly 13 million kilowatts.

To meet this peak, our conventional steam plants provided 50 percent of the power, hydro 16 percent, power received from other utilities 27 percent, and geothermal, cogen-

eration and combustion turbines supplied the remaining 7 percent.

Future growth of electric load in our system now is forecast at about 3.5 percent annually for the next several years. This is significantly below the five to seven percent annual growth rate experienced in past decades.

This new, lower forecast reflects anticipated results of further conservation programs and load management efforts, such as time-of-use rates.

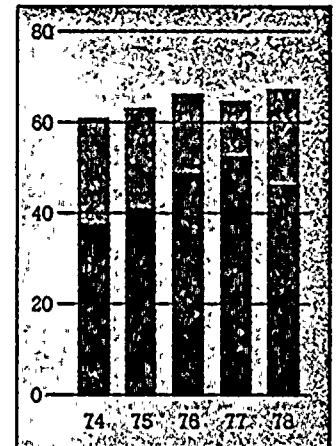
But due to population and industrial expansion, the demand on our system will continue to grow. We must bring on line new generation to maintain reliable service and a balanced system involving diverse sources of generation.

In the near term, the bulk of our resource requirements must come from base load sources using existing technologies.

**Nuclear**

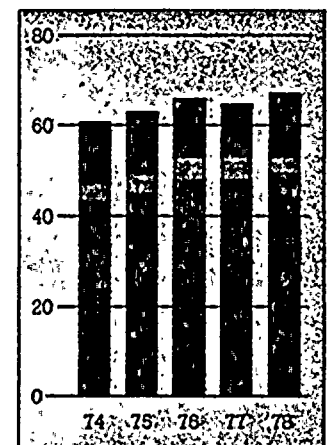
Hearings before a federal Atomic Safety and Licensing Board on our Diablo Canyon Nuclear Power Plant were completed on February 15, 1979. The Company expects to receive an operating license from the Nuclear Regulatory Commission for the plant in time for the first 1.1 million-kilowatt unit to be in operation in the

**Sources of Electric Energy**  
(Billions of Kilowatt Hours)



■ Received from Others  
■ Hydro  
■ Thermal

**Uses of Electric Energy**  
(Billions of Kilowatt Hours)

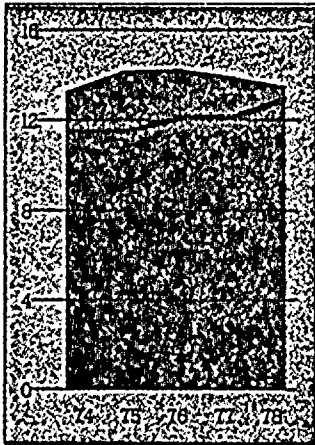


■ Other Uses  
■ Agricultural  
■ Industrial  
■ Residential and Commercial



This tunnel through more than 3,700 feet of solid rock leads to an underground powerhouse being built as part of the Company's Helms Pumped Storage Hydroelectric Project.

**Electric Peak and Capability**  
(Millions of Kilowatts)



■ Capability  
— Peak

summer of 1979. Operation of Unit 2 is expected in 1980.

Operation of these two units will increase our generating capability by nearly 20 percent.

**Coal**

Our planned two-unit, 1.6 million-kilowatt coal-fired steam plant to be built at one of four inland sites is now under consideration by the California Energy Commission.

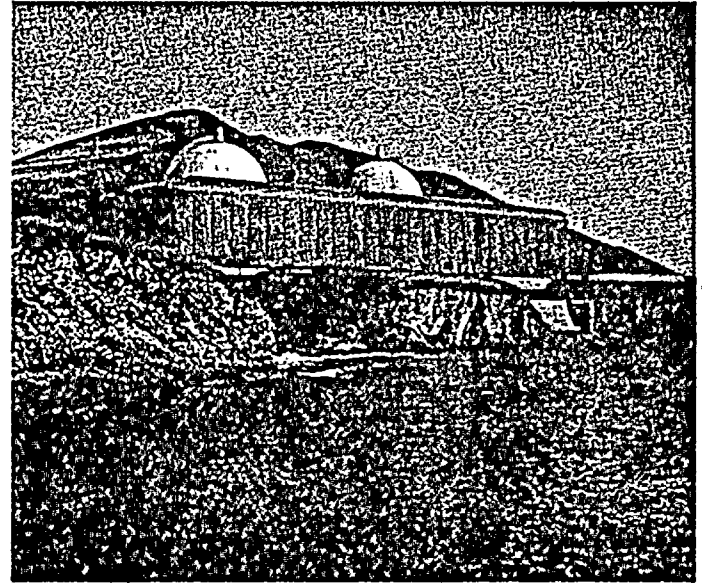
This facility, planned for commercial operation beginning in 1986, is expected to take about five years to build and cost about \$2 billion.

**Combined Cycle**

Our application to build a 414,000-kilowatt combined-cycle unit at our Potrero Power Plant in San Francisco is also before the Energy Commission. We hope to receive all government approvals in time to complete the first phase of this two-phase project in 1981 and the second phase in 1982.

A Notice of Intention was filed last year with the Energy Commission for a 1.6 million-kilowatt combined-cycle facility at Pittsburg in Contra Costa county, the first phase of which is planned for operation in 1982.

These combined cycle projects will add highly



After 10 years of construction, PG&E's Diablo Canyon Nuclear Plant will produce power upon receipt of an operating license from the Nuclear Regulatory Commission.

efficient generation to the Company's system. Although each project will use petroleum-based fuels, combined-cycle plants require less fuel than conventional oil-fired power plants to generate the same amount of energy. Exemptions from federal restrictions on the use of oil under the Powerplant and Industrial Fuel Act of 1978 will be required for these two projects.

**Geothermal**

We are committed to continued expansion of The Geysers Power Plant in Sonoma and Lake counties,

a source of economic, geothermal energy.

Notices of Intention to build Units 16 and 17 were filed with the Energy Commission in 1978 and we anticipate an expedited review process for these two 110,000-kilowatt units. When completed, they will bring our geothermal generating capability to more than 1.1 million kilowatts.

Ultimately, The Geysers may be able to supply as much as two million kilowatts of electricity.

**Hydro**

Hydro, too, will make its

contribution in the decade ahead with the completion in 1981 of our 1.1 million-kilowatt Helms Pumped Storage Project on the Kings River. An underground powerhouse located between an upper and lower reservoir is the heart of this \$381 million project.

An additional 156,000 kilowatts in hydroelectric generation will come from increasing the capability of four existing plants on Battle Creek in Shasta and Tehama counties and from our proposed Kerckhoff No. 2 underground hydro plant.

#### Cogeneration and Solid Waste

PG&E is discussing with various industries 12 cogeneration projects, fueled by fossil fuel, wood waste, waste heat and walnut shells, with an estimated capability of about one million kilowatts. In addition, the Company is studying five projects fueled by solid waste with a potential of up to 90,000 kilowatts.

#### New Technologies

Solar and wind power generation are among our active in-house research projects. In addition, PG&E support of and participation in research by the Electric Power Research Institute associates us with important technologies as

they approach feasibility for utility operation.

#### Gas Operations

An average of more than 1.7 billion cubic feet a day of natural gas was sold during 1978 to the Company's 2.7 million gas customers and other California utilities, or was used by PG&E primarily to generate electricity.

Approximately 48 percent of this gas came from Canada, 35 percent from the Southwest, and 17 percent from California producers.

In recent years, nationwide shortages, prolonged cold weather and regulatory restraints forced us on occasion to curtail use of gas by large industrial customers. Last year, however, service to industrial users, except power plants, was uninterrupted.

We are optimistic about our future gas supply for several reasons.

First, the California Public Utilities Commission issued a mid-year policy statement which recognized the importance of natural gas as a basic fuel in the state's economy. Commission policy henceforth will be to encourage and assist the Company in acquiring maximum available quantities of gas from new sources.

Second, extensive con-

servation efforts by consumers and industry have helped stretch our present gas supply at least into the mid-1980s, modifying for now our earlier predictions of the dates when shortages might occur.

Nonetheless, the fact remains that natural gas customers could face curtailments by the late 1980s unless new sources of gas become available.

#### More Gas Expected

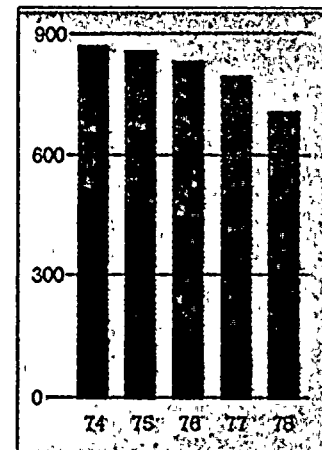
Supplies from Canada will continue at present volumes until the mid-1980s when current export permits begin to expire. The Company hopes, of course, that the Government of Canada will renew these permits.

In addition, we are optimistic that newly discovered gas in Alberta and the construction of pipelines to reserves in the Arctic will result in additional future imports.

Increased gas exploration in the Southwest indicates that more gas than earlier envisioned may be available to El Paso Natural Gas Company, our largest domestic supplier, during the next five years.

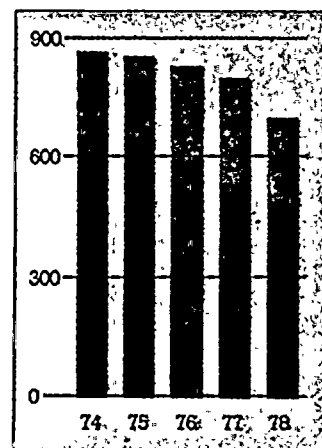
Although our gas purchases from California fields peaked in 1971, the decline may be slowed if new reserves are discovered in offshore wells or deeper wells on shore.

Sources of Natural Gas  
(Billions of Cubic Feet)



■ Canada  
■ El Paso  
■ California

Uses of Natural Gas  
(Billions of Cubic Feet)



■ Electric Generation and Other  
■ Industrial  
■ Residential and Commercial

## Supplemental Sources of Gas

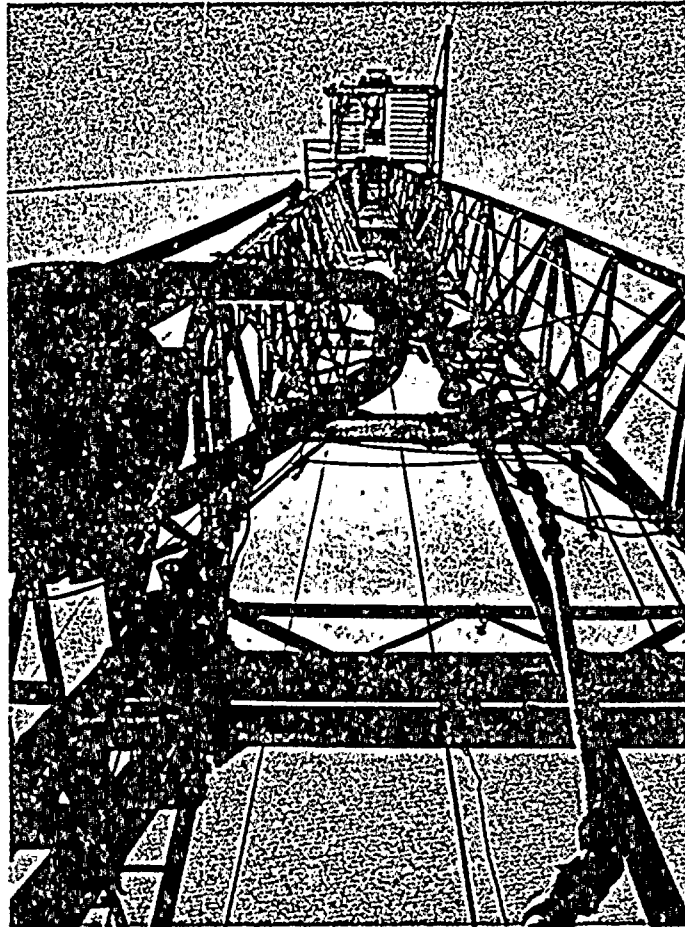
Adequate supplies of gas for the future will depend, too, upon supplemental sources. The most immediate need is to import liquefied natural gas from South Alaska and Indonesia.

PG&E and Southern California Gas Company, partners in these projects, have proposed a receiving terminal for LNG tankers at Little Cojo Bay near Point Conception. Conditional approvals for this \$600 million terminal have been received from the CPUC and the State Lands Commission. Final approval awaits a decision by the Department of Energy.

We are negotiating with several producers for gas from the North Slope of Alaska. And, through a subsidiary, we have funded six exploration projects in that area.

PG&E subsidiaries also are exploring for gas in Rocky Mountain regions that appear to have good potential. Last October, the Company filed a request with the CPUC to permit us, through appropriate subsidiaries, to explore with customer funding of financing charges extensive leaseholds in the area.

The Company also would be interested in participating in any project that would bring gas to California from Mexico.



Exploratory drilling in the Rocky Mountain states has added another source of natural gas for the PG&E system.

**New Gas Technologies**  
PG&E and the U.S. Environmental Protection Agency have funded a one-year pilot project to convert garbage to methane, the main component of natural gas. If successful, this facility at Mountain View probably will be enlarged and similar projects may be set up

at other sanitary landfills.

Another joint project with Southern California Gas Company is producing methane from cattle manure at a feedlot in the Imperial Valley. We are also studying ways to obtain methane from agricultural and food processing wastes.

## Service to Customers

During 1978 we continued to give high priority to maintaining customer satisfaction and encouraging conservation of energy.

For a number of years, we have measured customer satisfaction throughout our 13 divisions. Our 1978 survey indicated customer satisfaction was 97.5 percent in areas covering employee courtesy and responsiveness, gas and electric service work and handling new business.

More than half of our customers are now served by modern teleprocessing equipment. Here, information on customer accounts is displayed on a TV-like screen in seconds. This has improved customer service, increased employee productivity, and has resulted in substantial savings.

We estimate that our 1978 conservation programs have saved enough energy to meet the needs of approximately 24,000 average residential electric customers and 78,000 average residential gas customers for the next 10 years.

For large customers, seminars were held on ways to make the most efficient use of energy. On-site audits of commercial, industrial and agricultural plants received enthusiastic support, with more





Attic insulation is being installed in thousands of customer homes as a result of the Company's program to encourage energy conservation.

than two-thirds of customers at these locations following our recommended actions. Similar results were obtained through audits of government facilities and schools.

An Energy Conservation Center at our San Francisco headquarters offers information and publications on a variety of conservation methods. A toll-free telephone number makes this service available to customers throughout Northern and Central California.

Our contractor referral service puts callers and visitors in touch with qualified insulation contractors, and we offer to finance attic insulation with payment of PG&E bills.

### Our Employees

At year-end PG&E had 26,445 employees, 900 more than at the close of 1977. Among the factors requiring this rise were a net increase of more than 150,000 customers, the increasing complexity of our business, and the need to respond to additional government regulations.

About 70 percent of our employees are represented by the International Brotherhood of Electrical Workers (AFL-CIO), and 8 percent by the Engineers and Scientists of California.

In recent labor negotiations, a general wage increase for a 13-month period beginning December 1, 1978 and improvements in the Company's health plans were negotiated with these two unions. Both settlements are within the wage portion of the Wage-Price Guidelines of President Carter.

These adjustments also were extended to our non-represented weekly employees. Our Merit Pay Plan for management employees was also designed to meet the Presidential guidelines.

The Company's strong affirmative action program continued to provide entry jobs and merited advancement for women and members of minority groups. Minority group members now represent 24 percent of all Company

employees. This corresponds closely to the percentage of minority people of working age living in our service area.

A 20 percent increase in the number of women in professional and management positions occurred during 1978. Through recruiting programs and advancements, women in significant numbers continue to embark upon new careers with the Company as engineers, lawyers, accountants, customer service supervisors, personnel representatives and energy utilization representatives.

### Executive Changes

Directors acted in December to fill the top two company positions upon the retirement next June 1 of John F. Bonner, president and chief executive officer, and Richard H. Peterson, chairman of the board.

Frederick W. Mielke, Jr. will become chairman of the board and chief executive officer. Barton W. Shackelford will become president and chief operating officer. Both are currently executive vice presidents and directors of the Company.

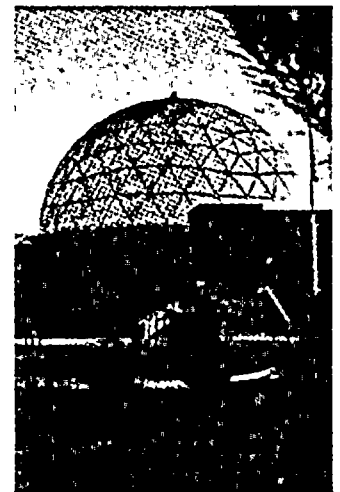
During 1978, the Company lost the valued services of four of its officers.

Death claimed Charles H. Sedam, vice president-general construction, and

Paul Matthew, vice president and assistant to the executive vice president.

Edward F. Sibley, vice president-gas operations, retired as did A. James McCollum, vice president-public relations.

Howard M. McKinley, formerly manager of the Company's San Francisco Division, was elected to succeed Mr. Sibley. Donald A. Brand, a nuclear engineer and superintendent of station construction, succeeded Mr. Sedam. Lawrence R. McDonnell, formerly manager of the Company's public information department, was elected to replace Mr. McCollum as vice president-public relations.



Company research is centered here at PG&E's Engineering Research Laboratory at San Ramon.

**FINANCIAL SECTION****QUARTERLY COMMON STOCK PRICES AND DECLARED DIVIDENDS**

December 31, 1978 and 1977

	1978				1977			
	4th	3rd	2nd	1st	4th	3rd	2nd	1st
High	\$24½	\$24¾	\$24¾	\$24½	\$24¾	\$25½	\$24¾	\$24¾
Low	21¾	22¾	23½	23	23	23½	22½	22½
Dividend	54c	54c	54c	54c	50c	50c	50c	50c

**LINES OF BUSINESS**

For the Five Years Ended December 31, 1978

The approximate percentage of operating revenues and operating income, including the allocation of taxes on income, attributable to each principal line of business was as follows:

	Operating Revenues		Operating Income	
	Electric	Gas	Electric	Gas
1974	64%	36%	83%	17%
1975	58%	42%	74%	26%
1976	62%	38%	75%	25%
1977	67%	33%	77%	23%
1978	61%	39%	81%	19%

**SUMMARY OF OPERATIONS**

For The Five Years Ended December 31, 1978

	In Thousands (Except per share amounts)				
	1978	1977	1976	1975	1974
<b>Operating Revenues</b>					
Electric	\$2,096,933	\$2,355,133	\$1,820,948	\$1,293,551	\$1,104,715
Gas	1,336,299	1,145,648	1,110,551	939,820	622,040
<b>Total</b>	<b>3,433,232</b>	<b>3,500,781</b>	<b>2,931,499</b>	<b>2,233,371</b>	<b>1,726,755</b>
<b>Operating Expenses</b>					
Operation					
Cost of Electric Energy	912,873	1,184,991	873,220	477,546	285,122
Cost of Gas Sold	1,019,233	906,965	831,851	675,609	395,924
Transmission and Distribution	127,475	121,823	114,910	101,710	93,432
Other	317,428	288,115	252,634	219,336	187,204
<b>Total</b>	<b>2,377,009</b>	<b>2,501,894</b>	<b>2,072,615</b>	<b>1,474,201</b>	<b>961,682</b>
Maintenance	120,509	110,407	96,277	90,853	90,631
Depreciation	220,105	209,227	199,491	178,978	166,605
Taxes on Income	129,120	76,564	116,579	13,783	54,203
Property and Other Taxes	133,491	158,476	142,667	128,303	123,025
<b>Total</b>	<b>2,980,234</b>	<b>3,056,568</b>	<b>2,527,629</b>	<b>1,886,118</b>	<b>1,396,146</b>
<b>Operating Income</b>	<b>452,998</b>	<b>444,213</b>	<b>403,870</b>	<b>347,253</b>	<b>330,609</b>
<b>Other Income and Income Deductions</b>					
Allowance for Equity Funds Used During Construction	109,052	75,827	60,559	50,916	41,687
Other - Net	64,817	55,984	42,207	38,420	42,549
<b>Total</b>	<b>173,869</b>	<b>131,811</b>	<b>102,766</b>	<b>89,336</b>	<b>84,236</b>
<b>Income Before Interest Charges</b>	<b>626,867</b>	<b>576,024</b>	<b>506,636</b>	<b>436,589</b>	<b>414,845</b>
<b>Interest Charges</b>					
Interest Expense	255,252	245,431	223,255	204,445	169,519
Allowance for Borrowed Funds Used During Construction	(29,969)	(25,705)	(18,603)	(19,435)	(15,911)
<b>Total</b>	<b>225,283</b>	<b>219,726</b>	<b>204,652</b>	<b>185,010</b>	<b>153,608</b>
<b>Net Income</b>	<b>401,584</b>	<b>356,298</b>	<b>301,984</b>	<b>251,579</b>	<b>261,237</b>
<b>Preferred Dividend Requirements</b>	<b>83,337</b>	<b>73,903</b>	<b>63,685</b>	<b>48,301</b>	<b>45,253</b>
<b>Earnings Available for Common</b>	<b>\$ 318,247</b>	<b>\$ 282,395</b>	<b>\$ 238,299</b>	<b>\$ 203,278</b>	<b>\$ 215,984</b>
<b>Average Common Shares Outstanding</b>	<b>99,580</b>	<b>89,728</b>	<b>82,138</b>	<b>76,265</b>	<b>66,146</b>
<b>Earnings Per Common Share</b>	<b>\$3.20</b>	<b>\$3.15</b>	<b>\$2.90</b>	<b>\$2.67</b>	<b>\$3.27</b>
<b>Dividends Declared Per Common Share</b>	<b>\$2.16</b>	<b>\$2.00</b>	<b>\$1.88</b>	<b>\$1.88</b>	<b>\$1.88</b>

### Summary

The Company's financial results during the previous five years have been impacted dramatically, and in recent years favorably, by various ratemaking mechanisms adopted by the California Public Utilities Commission (CPUC).

First, a series of "balancing accounts" have been established with a view to insuring ultimate recovery of major costs as well as reducing the exposure of the Company's earnings to fluctuations in gas sales. The accounts are: (1) An Energy Cost Adjustment Clause (ECAC), effective April 1976, which accumulates differences between the fuel costs of producing energy or the cost of producing such energy and the portion of these costs billed to customers. (2) A Gas Cost Balancing Account (GCBA), effective August 1976, which accumulates the differences between the costs of gas purchased and gas costs billed to customers. (3) A gas Supply Adjustment Mechanism (SAM), effective June 1978, which accumulates differences between billed revenues and revenues that would have been generated if sales volumes used to fix rates in the most recent gas rate case had been realized. (4) A Tax Change Adjustment Clause (TCAC), effective July 1978, which accumulates changes in property taxes along with changes in other taxes, licenses or fees imposed by local governments, thus assuring that only net reductions resulting from Proposition 13 are passed to customers. The accounting treatment for such accounts is described under "Operating Revenues." To minimize the frequency of rate adjustments, accumulated amounts in balancing accounts are generally recovered from customers through semi-annual rate adjustments.

Second, adoption by the CPUC in 1977 of a plan to reduce regulatory lag by processing general rate cases (which address all costs other than electric fuel costs and purchased gas costs handled through the ECAC and the GCBA), within twelve months of the filing of an application. Implementation of this plan resulted in the granting of partial electric rate relief in January 1978, and a final decision on the Company's 1978 test year electric and gas general rate case in September 1978.

The combination of these ratemaking mechanisms accounted for the improvement of 25 cents per common share to \$3.15 for 1977, and an additional 5 cents per share to \$3.20 for 1978.

The earned return on common equity improved to 10.9% in 1978, up from the 10.6% level experienced in 1977.

In subsequent years, full implementation of SAM and the Regulatory Lag Plan will greatly enhance the Company's opportunity to earn the return found reasonable by the CPUC.

### Operating Revenues

Operating revenues for 1978 amounted to \$3.4 billion, a decrease of \$68 million or 2% from 1977. Electric revenues contributed about 61% of the total, and gas revenues 39%. The significant changes in operating revenues in recent years are due primarily to increases in rates and to balancing account activity. The following table sets forth the amounts by which the Company's electric and gas revenues during each of the last four years increased or decreased from the preceding year, together with estimated changes attributable to the major factors. Additional information about the Company's 1978 rate increases can be found in the "Finance and Rates" section on Page 12.

	Year Ended December 31			
	1978	1977	1976	1975
<b>Electric Revenues</b>	—Millions—			
Rate Changes				
Cost of Energy	\$ 21.8	\$630.7	\$ 523	\$ 940
General	67.0	887	1468	344
Sales Volume and Other Changes	(28.6)	539	79.2	60.4
Subtotal	60.2	773.3	278.3	188.8
Balancing Accounts Activity	(318.4)	(239.1)	249.1	—
Net Increase (Decrease)	\$ (258.2)	\$ 534.2	\$ 527.4	\$ 188.8
<b>Gas Revenues</b>				
Rate Changes				
Cost of Gas Purchased	\$ 54.6	\$138.6	\$166.9	\$291.1
General	22.8	288	49.7	134
Sales Volume and Other Changes	(100.1)	(77.2)	(81.5)	133
Subtotal	(22.7)	90.2	135.1	317.8
Balancing Accounts Activity	213.4	(55.1)	35.8	—
Net Increase	\$ 190.7	\$ 35.1	\$ 170.7	\$ 317.8

From April 1976 through July 1978 activity in the balancing accounts described in the "Summary" above were recorded as deferrals of costs of electric energy and costs of gas sold. Commencing in August 1978, such

differences have been recorded as additional revenue or as deferrals of revenue, as appropriate.

Balancing account activity in financial statements for the first seven months of 1978 and the years 1977 and 1976 has been reclassified to be consistent with the current presentation. Operating revenues (and expenses) for the year 1977 were decreased by \$4.8 million, and operating revenues (and expenses) for 1976 were increased by \$284.8 million. Operating income and net income were unaffected by these reclassifications.

#### Operating Expenses

The costs of purchased gas and the costs of producing electric energy have increased in recent years. The limited availability of natural gas for use as boiler fuel and the drought-induced reduction in hydroelectric generation in 1977 required the Company to increase its use of high-cost low-sulfur oil in the generation of electric power.

However, the improved water conditions in 1978 made it possible for the Company to increase its hydroelectric generation and to purchase low-cost hydro power from others. The following table shows fuel oil burned, power purchased and natural gas delivered to the Company with the average prices of natural gas and fuel oil.

Year Ended December 31

	1978	1977	1976	1975	1974
Fuel Oil Burned (Thousands of Barrels)	28,874	35,928	47,652	11,622	17,421
Average Cost Per Barrel of Fuel Oil Burned	\$15.49	\$14.26	\$14.86	\$14.90	\$10.85
Power Purchased (Thousands of Dollars)	\$142,942	\$235,528	\$147,455	\$106,489	\$68,904
Power Purchased (Millions of KWH)	15,018	9,792	13,112	16,237	17,242
Natural Gas Delivered (Thousands of MCF)	676,255	792,921	832,202	860,178	834,127
Average Cost of Gas Delivered (Per MCF)	\$1.88	\$1.60	\$1.32	\$1.45	\$1.57

Other operation expense increased by \$29,000,000 in 1978 and \$35,000,000 in 1977. In 1978, customer related expenses, especially conservation programs, contributed \$11,000,000, and administrative and general expense contributed \$16,000,000 to the increase. The increased costs of administrative and general expense in 1978 were

due primarily to higher wages and the increased costs of employee benefits. In 1977, administrative and general expense contributed \$29,000,000 of the increase because of the increased costs of employee benefits, wages and city and county franchise taxes.

The increase of \$14,000,000 in maintenance expense in 1977 was due primarily to the costs of maintaining electric production and distribution facilities.

Property taxes in years prior to 1978 were in an upward trend due to increased assessed values and an expanded investment base. The implementation of the Jarvis-Gann Initiative in 1978, limiting property taxes, resulted in a property tax reduction of \$28,000,000 from 1977, which represents the tax reduction for a six month period.

Costs of electric energy and costs of gas sold are deductible on federal and state income tax returns in the year such costs are incurred and revenues are taxable in the year they are billed to customers. In computing book income taxes, however, costs of electric energy and costs of gas sold as well as gas and electric revenues are included only to the same extent they are included in the statement of income. The difference in taxes is included in accrued taxes payable. A discussion of other factors that contributed to variations in income tax expense can be found in Note 3 of Notes to Financial Statements.

#### Other Income and Income Deductions and Interest Charges

The amount of allowance for funds used during construction (ADC) has increased in recent years primarily due to the construction of Units 1 and 2 of the Company's Diablo Canyon nuclear generating plant. The amount of ADC recorded in 1978, which is estimated to be applicable to construction planned for completion in 1979, 1980 and 1981 is \$68,000,000, \$80,000,000 and \$8,000,000, respectively. Substantially all of the ADC applicable to jobs planned for completion in 1979 and 1980 represents ADC for the two nuclear units at Diablo Canyon.

The increase in other net for 1978 was principally due to increased tax benefits resulting from an increase in non-utility tax losses. The increase in other net for 1977 was due to increased interest income and higher earnings of subsidiaries. See Note 5 of Notes to Financial Statements.

**COMPARATIVE STATISTICS**

For the Eleven Years Ended December 31, 1978

	1978	1977	1976	1975
<b>Per Common Share</b>				
Earnings	\$ 3.20	\$ 3.15	\$ 2.90	\$ 2.67
Dividends Declared	\$ 2.16	\$ 2.00	\$ 1.88	\$ 1.88
Dividend Payout Ratio	67.5%	63.5%	64.8%	70.4%
Book Value (end of year)	\$29.76	\$28.78	\$28.16	\$27.71
Market Price - High	24%	25%	24%	23%
Market Price - Low	21%	22%	20%	18%
Market Price - Close	22%	24%	23%	20%
<b>Capital Expenditures (Thousands)</b>				
Electric Department	\$718,572	\$599,126	\$518,398	\$540,790
Gas Department	89,424	91,198	80,880	89,799
<b>Total</b>	<b>\$807,996</b>	<b>\$690,324</b>	<b>\$599,278</b>	<b>\$630,589</b>
<b>Electric Statistics</b>				
Net System Output (Millions of KWH)	67,669	65,428	66,416	63,402
Net System Output - Percent				
Hydroelectric Plants	19.9%	9.2%	12.2%	22.6%
Thermal Electric Plants	49.5	72.4	62.0	43.6
Other Producers	30.6	18.4	25.8	33.8
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
System Capacity - KW (at annual peak)				
Hydroelectric Plants (adverse conditions)	2,350,900	2,350,900	2,419,900	2,396,900
Thermal Electric Plants	8,294,000	8,294,000	8,261,000	8,053,000
Other Producers (adverse conditions)	2,791,100	3,302,900	3,743,400	3,766,100
<b>Total</b>	<b>13,436,000</b>	<b>13,947,800</b>	<b>14,424,300</b>	<b>14,216,000</b>
Net System Peak Demand - KW	12,970,600	12,191,800	12,246,800	11,632,800
Average Annual Residential Consumption - KWH	6,553	6,408	6,509	6,462
Total Customers (end of year)	3,270,302	3,179,362	3,087,300	3,005,518
Customers Per Mile of Distribution Line	38.5	38.1	37.7	37.2
<b>Gas Statistics</b>				
Gas Purchased (Thousands of MCF)	699,594	800,950	836,333	861,860
Sources of Gas Purchased - Percent				
From California	16.7%	16.4%	16.8%	16.2%
From Other States	35.4	37.0	38.2	41.4
From Canada	47.9	46.6	45.0	42.4
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Average Cost of Gas Purchased - MCF				
From California	159.4c	112.1c	96.1c	56.7c
From Other States (at Calif.-Ariz. border)	135.1	110.0	83.0	72.7
From Canada (at Calif.-Ore. border)	239.9	218.0	192.1	136.8
Average	189.3c	160.7c	134.2c	97.3c
Peak Day Sendout - MCF	3,243,552	3,186,229	3,348,909	3,352,881
Average Annual Residential Consumption - MCF	86.9	90.5	100.8	111.1
Total Customers (end of year)	2,738,767	2,674,890	2,611,551	2,555,216
Customers Per Mile of Distribution Main	97.4	97.2	96.8	96.4

1974	1973	1972	1971	1970	1969	1968
\$3.27	\$3.23	\$3.02	\$2.75	\$2.47	\$2.58	\$2.55
\$1.88	\$1.78	\$1.72	\$1.64	\$1.50	\$1.50	\$1.45
57.5%	55.1%	57.0%	59.7%	60.9%	58.2%	57.0%
\$28.18	\$27.80	\$28.36	\$24.91	\$23.66	\$22.79	\$21.71
24%	32%	33%	36%	35%	39 1/2%	38%
17	21 1/2	26%	28%	22 1/2	29 1/2	30%
20%	22%	32%	32%	34%	32%	38%
\$536,931	\$465,422	\$468,617	\$379,198	\$330,559	\$265,789	\$220,516
108,729	100,117	84,823	72,653	84,772	74,201	68,884
\$645,660	\$565,539	\$543,640	\$451,851	\$415,331	\$339,990	\$289,400
60,932	60,572	59,124	54,665	51,277	48,885	46,994
25.6%	21.5%	19.8%	25.6%	26.9%	31.4%	23.8%
38.1	53.4	52.7	46.5	48.6	45.2	62.2
36.3	25.1	27.5	27.9	24.5	23.4	14.0
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2,396,900	2,384,800	2,369,800	2,364,900	2,364,900	2,247,900	2,277,300
7,947,000	7,941,000	7,062,000	6,956,000	6,942,400	6,962,400	6,302,600
2,948,700	2,554,700	2,609,900	2,438,700	2,098,000	1,560,700	1,056,200
13,292,600	12,780,500	12,041,700	11,759,600	11,405,300	10,771,000	9,636,100
11,648,800	10,867,800	10,469,800	9,713,000	8,807,700	8,227,100	8,126,200
6,260	6,417	6,213	6,048	5,697	5,545	5,181
2,936,106	2,854,585	2,767,978	2,675,942	2,597,314	2,536,703	2,483,480
36.9	36.5	36.0	35.4	34.8	34.5	34.3
876,537	984,061	1,015,319	1,004,547	950,852	878,484	888,075
16.8%	23.6%	23.5%	24.8%	25.2%	25.2%	27.5%
43.7	38.4	40.3	41.2	43.7	45.3	45.5
39.5	38.0	36.2	34.0	31.1	29.5	27.0
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
42.7c	37.0c	33.7c	31.7c	30.2c	29.9c	30.3c
55.8	43.0	39.4	37.5	33.9	31.4	27.9
65.4	44.1	38.9	32.7	30.4	28.2	28.0
57.4c	42.0c	37.2c	34.3c	31.9c	30.1c	28.6c
3,020,215	3,423,896	3,918,844	3,798,462	3,663,341	3,445,626	3,338,669
104.5	113.4	115.7	121.7	107.7	116.2	109.7
2,503,203	2,443,889	2,383,609	2,317,686	2,258,285	2,208,046	2,160,569
96.1	95.9	95.6	95.0	94.1	94.0	93.8

**REVENUES AND SALES**

For The Years Ended December 31, 1978 and 1977

	In Thousands		Increase (Decrease)	
	1978	1977	Amount	Percent
<b>Electric Department</b>				
<b>Revenues</b>				
Residential	\$ 720,112	\$ 661,502	\$58,610	8.9%
Commercial	852,265	789,401	62,864	8.0
Industrial (1000 Kw demand or over)	531,593	498,462	33,131	6.6
Agricultural Power	149,986	212,649	(62,663)	(29.5)
Public Street and Highway Lighting	34,179	33,501	678	2.0
Other Electric Utilities	69,855	103,890	(34,035)	(32.8)
Miscellaneous	43,584	42,075	1,509	3.6
Other	3,814	3,664	150	4.1
Regulatory Balancing Account Changes	(308,455)	9,989	(318,444)	—
<b>Total</b>	<b>\$2,096,933</b>	<b>\$2,355,133</b>	<b>\$ (258,200)</b>	<b>(11.0)</b>
<b>Sales - KWH</b>				
Residential	18,314,721	17,383,011	931,710	5.4
Commercial	17,166,973	16,171,232	995,741	6.2
Industrial (1000 Kw demand or over)	14,815,289	14,354,359	460,930	3.2
Agricultural Power	3,120,644	5,113,726	(1,993,082)	(39.0)
Public Street and Highway Lighting	485,725	491,558	(5,833)	(1.2)
Other Electric Utilities	2,232,563	3,957,141	(1,724,578)	(43.6)
<b>Total Sales to Customers</b>	<b>56,135,915</b>	<b>58,071,027</b>	<b>(1,935,112)</b>	<b>(3.3)</b>
<b>Gas Department</b>				
<b>Revenues</b>				
Residential	\$ 432,865	\$ 414,087	\$ 18,778	4.5%
Commercial	346,229	365,623	(19,394)	(5.3)
Industrial	340,546	366,293	(25,747)	(7.0)
Other Gas Utilities	18,384	14,349	4,035	28.1
Miscellaneous	4,315	4,773	(458)	(9.6)
Regulatory Balancing Account Changes	193,960	(19,477)	213,437	—
<b>Total</b>	<b>\$1,336,299</b>	<b>\$1,145,648</b>	<b>\$190,651</b>	<b>16.6</b>
<b>Sales - MCF</b>				
Residential	220,076	223,732	(3,656)	(1.6)
Commercial	144,162	163,828	(19,666)	(12.0)
Industrial	138,975	162,529	(23,554)	(14.5)
Other Gas Utilities	9,926	7,810	2,116	27.1
<b>Total Sales to Customers</b>	<b>513,139</b>	<b>557,899</b>	<b>(44,760)</b>	<b>(8.0)</b>
Company Use (electric generation)	125,636	217,272	(91,636)	(42.2)
<b>Total</b>	<b>638,775</b>	<b>775,171</b>	<b>(136,396)</b>	<b>(17.6)</b>



Pacific Gas and Electric Company

For The Years Ended December 31, 1978 and 1977

	In Thousands	
	(Except per share amounts)	
	1978	1977
<b>Operating Revenues</b>		
Electric	\$2,096,933	\$2,355,133
Gas	1,336,299	1,145,648
<b>Total</b>	<b>3,433,232</b>	<b>3,500,781</b>
<b>Operating Expenses</b>		
<b>Operation</b>		
Cost of Electric Energy	912,873	1,184,991
Cost of Gas Sold	1,019,233	906,965
Transmission	29,865	30,473
Distribution	97,610	91,350
Customer Accounts and Services	101,284	90,481
Administrative and General	178,508	162,122
Other	37,636	35,512
<b>Total</b>	<b>2,377,009</b>	<b>2,501,894</b>
Maintenance	120,509	110,407
Depreciation	220,105	209,227
Taxes on Income (Note 3)	129,120	76,564
Property and Other Taxes	133,491	158,476
<b>Total</b>	<b>2,980,234</b>	<b>3,056,568</b>
<b>Operating Income</b>	<b>452,998</b>	<b>444,213</b>
<b>Other Income and Income Deductions</b>		
Allowance for Equity Funds Used During Construction	109,052	75,827
Interest Income	22,927	29,185
Equity in Earnings of Subsidiary Companies (Note 5)	19,579	13,609
Other-net	22,311	13,190
<b>Total</b>	<b>173,869</b>	<b>131,811</b>
<b>Income Before Interest Charges</b>	<b>626,867</b>	<b>576,024</b>
<b>Interest Charges</b>		
Interest Expense (principally mortgage bonds)	255,252	245,431
Less Allowance for Borrowed Funds Used During Construction	(29,969)	(25,705)
<b>Total</b>	<b>225,283</b>	<b>219,726</b>
<b>Net Income</b>	<b>\$ 401,584</b>	<b>\$ 356,298</b>
<b>Earnings Per Common Share</b>	<b>\$3.20</b>	<b>\$3.15</b>
<b>Dividends Declared Per Common Share</b>	<b>\$2.16</b>	<b>\$2.00</b>

The accompanying notes to financial statements and schedule are an integral part of these statements.

December 31, 1978 and 1977

In Thousands

	1978	1977
<b>Utility Plant - At Original Cost</b>		
Electric	\$5,963,193	\$5,635,911
Gas	1,811,672	1,725,295
Construction Work in Progress	2,038,986	1,690,303
<b>Total Utility Plant</b>	<b>9,813,851</b>	<b>9,051,509</b>
Accumulated Depreciation	2,471,222	2,278,694
<b>Utility Plant - Net</b>	<b>7,342,629</b>	<b>6,772,815</b>
<b>Investments in Subsidiaries (Note 6)</b>	<b>176,505</b>	<b>126,821</b>
<b>Current Assets</b>		
Cash	23,800	25,466
Short-term Investments - at cost which approximates market	-	6,993
Accounts Receivable (less allowance for uncollectible accounts: 1978, \$5,161; 1977, \$5,120)	417,709	347,540
Materials and Supplies	47,099	30,535
Fuel Oil	154,405	248,961
Regulatory Balancing Accounts - recoverable	129,668	285,230
Gas Stored Underground	162,090	108,706
Prepayments	36,788	32,172
<b>Total Current Assets</b>	<b>971,559</b>	<b>1,085,603</b>
<b>Deferred Charges</b>	<b>11,379</b>	<b>12,774</b>
<b>Total</b>	<b>\$8,502,072</b>	<b>\$7,998,013</b>
<b>Capitalization</b>		
Common Stock - at par (Schedule I)	\$1,008,793	\$ 983,901
Additional Paid-in Capital	664,337	623,042
Reinvested Earnings	1,329,072	1,224,344
<b>Common Stock Equity</b>	<b>3,002,202</b>	<b>2,831,287</b>
Preferred Stock - at par (Schedule I)	1,102,451	977,451
<b>Total Stockholders' Equity</b>	<b>4,104,653</b>	<b>3,808,738</b>
Mortgage Bonds (Note 2)	3,364,758	3,232,807
<b>Total Capitalization</b>	<b>7,469,411</b>	<b>7,041,545</b>
<b>Current Liabilities</b>		
Short-term Borrowings (Note 4)	38,990	97,628
Accounts Payable	332,487	284,287
Accrued Taxes Payable	221,229	178,206
Regulatory Balancing Accounts - refundable	31,128	64,434
Dividends Payable	54,442	45,374
Mortgage Bonds - current portion (Note 2)	72,921	55,695
Other	71,648	64,269
<b>Total Current Liabilities</b>	<b>822,845</b>	<b>789,893</b>
<b>Customer Advances for Construction</b>	<b>75,912</b>	<b>66,081</b>
<b>Deferred Investment Tax Credits</b>	<b>51,936</b>	<b>34,588</b>
<b>Other Deferred Credits</b>	<b>50,378</b>	<b>31,369</b>
<b>Deferred Income Taxes on Defense Facilities</b>	<b>31,590</b>	<b>34,537</b>
<b>Total</b>	<b>\$8,502,072</b>	<b>\$7,998,013</b>

**STATEMENTS OF CHANGES IN FINANCIAL POSITION**

For The Years Ended December 31, 1978 and 1977

	In Thousands	
	1978	1977
<b>Funds Provided</b>		
<b>Funds Derived from Operations</b>		
Net Income	\$ 401,584	\$ 356,298
Non-fund Items in Net Income		
Depreciation (including charges to other accounts)	223,152	212,751
Allowance for Equity Funds Used During Construction	(109,052)	(75,827)
Other-net	(18,708)	(12,689)
<b>Total Funds Derived from Operations</b>	<b>496,976</b>	<b>480,533</b>
Common Stock Sold-net proceeds	58,758	225,638
Preferred Stock Sold-net proceeds	132,429	106,223
Mortgage Bonds Sold-net proceeds	249,567	198,393
Regulatory Balancing Accounts Changes-net	122,256	54,069
Other Funds Provided-net	13,154	12,675
<b>Total</b>	<b>\$1,073,140</b>	<b>\$1,077,531</b>
<b>Funds Applied</b>		
Capital Expenditures	\$ 807,996	\$ 690,324
Allowance for Equity Funds Used During Construction	(109,052)	(75,827)
<b>Funds Used for Capital Expenditures</b>		
Fuel Oil Inventory	698,944	614,497
Mortgage Bonds Purchased for Sinking Fund (at cost)	(94,556)	36,909
Matured Mortgage Bonds Retired	35,108	33,261
Dividends-preferred and common stock	47,600	47,156
Changes in Other Working Capital Items (a)	296,856	252,255
	89,188	93,453
<b>Total</b>	<b>\$1,073,140</b>	<b>\$1,077,531</b>
<b>(a) Changes in Other Working Capital Items</b>		
Accounts Receivable-net	\$ 70,169	\$ 79,358
Gas Stored Underground	53,384	18,408
Estimated Federal Income Tax Refund	-	(75,000)
Accrued Taxes Payable	(43,023)	(56,051)
Accounts Payable	(48,200)	(40,173)
Short-term Borrowings	58,638	168,367
Other Changes in Working Capital	(1,780)	(1,456)
<b>Total-increase</b>	<b>\$ 89,188</b>	<b>\$ 93,453</b>

The accompanying notes to financial statements and schedule are an integral part of these statements.

**STATEMENTS OF STOCKHOLDERS' EQUITY**

For The Years Ended December 31, 1978 and 1977

	In Thousands			
	Preferred Stock	Common Stock	Additional Paid-in Capital	Reinvested Earnings
Balance, January 1, 1977	\$ 877,451	\$ 886,106	\$ 488,976	\$1,120,301
Net Income—for year				356,298
Preferred Stock Sold (4,000,000 Shares)	100,000		6,223	
Common Stock Sold (9,779,518 Shares)		97,795	127,843	
Dividends Declared—Cash				
Preferred Stock				(72,352)
Common Stock				(179,903)
Balance, December 31, 1977	977,451	983,901	623,042	1,244,344
Net Income—for year				401,584
Preferred Stock Sold (5,000,000 Shares)	125,000		7,429	
Common Stock Sold (2,489,160 Shares)		24,892	33,866	
Dividends Declared—Cash				
Preferred Stock				(81,196)
Common Stock				(215,660)
<b>Balance, December 31, 1978</b>	<b>\$1,102,451</b>	<b>\$1,008,793</b>	<b>\$664,337</b>	<b>\$1,329,072</b>

The accompanying notes to financial statements and schedule are an integral part of these statements.

**SHARES OUTSTANDING**

December 31, 1978

	In Thousands			
	Redemption Price	Shares Authorized	Outstanding - Held by Public	
			Shares	Amount
<b>Common, Par Value \$10 Per Share</b>		125,000	100,879	\$1,008,793
<b>Preferred, Cumulative, Par Value \$25 Per Share</b>				
<b>Redeemable</b>				
10.46% (\$2.615 a share)	\$30.10	3,500	3,500	\$ 87,500
10.28% (\$2.57 a share)	30.00	5,000	5,000	125,000
10.18% (\$2.545 a share)	30.00	4,000	4,000	100,000
9.48% (\$2.37 a share)	30.25	3,000	3,000	75,000
9.30% (\$2.325 a share)	29.80	4,000	4,000	100,000
9.28% (\$2.32 a share)	28.00	707	707	17,674
9% (\$2.25 a share)	29.25	881	881	22,027
8.20% (\$2.05 a share)	29.375	2,000	2,000	50,000
8.16% (\$2.04 a share)	28.875	3,000	3,000	75,000
8% (\$2.00 a share)	29.375	2,000	2,000	50,000
7.84% (\$1.96 a share)	29.00	2,000	2,000	50,000
5% (\$1.25 a share)	26.75	2,861	2,861	71,524
5% - Series A (\$1.25 a share)	26.75	1,750	1,719	42,985
4.80% (\$1.20 a share)	27.25	1,517	1,517	37,934
4.50% (\$1.125 a share)	26.00	1,128	1,128	28,186
4.36% (\$1.09 a share)	25.75	1,000	1,000	25,000
Unclassified in Series	-	15,871	-	-
<b>Total Redeemable</b>		54,215	38,313	957,830
<b>Non-Redeemable</b>				
6% (\$1.50 a share)		4,212	4,212	105,292
5.50% (\$1.375 a share)		1,173	1,173	29,329
5% (\$1.25 a share)		400	400	10,000
<b>Total Non-Redeemable</b>		5,785	5,785	144,621
<b>Total Preferred</b>		60,000	44,098	\$1,102,451

The accompanying notes to financial statements are an integral part of these statements and this schedule.

**NOTES TO FINANCIAL STATEMENTS**

For The Years Ended December 31, 1978 and 1977.

**NOTE 1****Summary of Significant Accounting Policies****Accounting Records**

The accounting records of the Company are maintained in accordance with the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) and adopted by the California Public Utilities Commission (CPUC).

**Utility Plant**

The cost of additions to utility plant and replacements of retirement units of property is capitalized. Cost includes labor, material and similar items and indirect charges for such items as engineering, supervision and transportation. Cost also includes an allowance for funds used during construction (ADC) for the imputed cost of equity investment and a net after-tax amount for borrowed funds. The equity component of ADC is included in other income and the net borrowed funds component is recorded as a reduction of interest charges. Costs of depreciable units of plant retired are eliminated from utility plant accounts and such costs plus removal expenses less salvage are charged to accumulated depreciation. Costs of repairing property and replacement of minor items of property are included in the Statements of Income as maintenance

**Research and Development**

Research and development (R&D) costs related to specific construction projects and a portion of general engineering research costs are capitalized. Other R&D costs are charged to expense as incurred.

**Inventories**

Inventories of materials and supplies, fuel oil, and gas stored underground are stated at average cost.

**Revenues**

Revenues consist of billings to customers and activity in balancing accounts. Billings to customers are included in revenues as meters are read on a cycle basis throughout each month. In accordance with orders of the CPUC, the Company has established balancing accounts for electric energy costs, gas costs, gas sales, and property taxes. Since August 1978 operating revenues have included all activity in these balancing accounts. This activity represents amounts authorized by the CPUC to be recovered from or refunded to customers. Prior to August 1978 activity in balancing accounts was included in cost of electric energy or cost of gas as well as revenues. Balancing account activity during the years 1977 and 1978, as well as during the first and second quarters of 1978, has been reclassified to revenues. The effect of using these

balancing accounts is that changes in costs to the Company of electric energy, gas, property taxes, and fluctuations in gas sales no longer affect the Company's earnings.

**Depreciation**

For financial statement purposes, depreciation of utility plant is computed on a straight-line remaining life basis at rates based on the estimated useful lives of properties. The annual provisions for depreciation expressed as a percentage of the average balances of depreciable plant were 3.1% for 1978 and 1977.

**Income Taxes**

The CPUC requires that the Company include in net income the current tax differences arising from certain timing differences in connection with depreciation, ADC and other overhead costs of construction. For federal income tax purposes, depreciation is generally computed using the most liberalized methods allowed by the Internal Revenue Code. Investment tax credits are applied as a reduction of federal income tax expense through the use of a five-year moving average method. Such tax differences are reflected in customer rates authorized by the CPUC. In computing book income taxes, costs of electric energy and costs of gas sold, as well as gas and electric revenues, are included only to the same extent they are included in the Statements of Income. (See Note 3.)

**Bond Premium, Discount and Related Expenses**

Bond issuance premium or discount and related expenses are being amortized over the lives of the issues to which they pertain. The gain or loss on reacquisition of bonds to satisfy sinking fund requirements is amortized over the remaining life of the reacquired issues. The federal income tax on such gain is recognized over the life of the remaining property.

**Retirement Plan**

Retirement plan costs are accrued in accordance with an actuarial cost method (entry age normal method). At December 31, 1978, the value of retirement plan assets exceeded the estimated vested benefits of the plan.

**Investments in Subsidiaries**

Investments in subsidiaries are stated in accordance with the equity method. The assets, revenues, and earnings of the subsidiaries are not significant in relation to those of the Company. Approximately 61% and 63% of the cost of the Company's natural gas purchased in the years 1978 and 1977 were from Pacific Gas Transmission Company, a 53% owned subsidiary. The price paid is regulated by the FERC.

### Earnings Per Common Share

Earnings per common share were computed by dividing earnings available for common stock by the weighted average number of common shares outstanding. The weighted average number of common shares outstanding is computed by dividing the aggregate of the number of common shares outstanding at the beginning of each month during each year by twelve.

### Note 2

#### Mortgage Bonds

At December 31, 1978, the First and Refunding Mortgage Bonds outstanding held by the public were as follows:

Maturity	2-3/4% to	4-1/4% to	5-1/2% to	Total
	3-3/4%	6-7/8%	8.85%	
Thousands				
1979	\$ 66,973			\$ 66,973
1980	51,405			51,405
1981	21,117			21,117
1982	63,750		150,000	213,750
1983	55,288		18,700	73,988
1984-1993	194,596	\$258,528	208,300	661,424
1994-2003		339,389	609,834	949,223
2004-2011		2,870	1,166,000	1,168,870
<b>Total Mortgage Bonds</b>	<b>\$353,129</b>	<b>\$900,787</b>	<b>\$2,303,434</b>	<b>\$3,457,350</b>
Mortgage Bonds included in Current Liabilities				72,921
Unamortized Discount Net of Premium				19,671
<b>Mortgage Bonds included in Capitalization</b>				<b>\$3,364,758</b>

Subject to indenture provisions as to earnings coverages and bondable property available for security, additional bonds may be issued up to an outstanding aggregate amount of \$5,000,000,000. The Board of Directors may from time to time increase the amount authorized. All real properties and substantially all personal properties are subject to the lien of the mortgage. Securities representing investments in subsidiaries are pledged as collateral for the bonds.

The Company is required, according to provisions of the First and Refunding Mortgage, to make semiannual sinking fund payments on February 1 and August 1 of each year for the retirement of the bonds of any series equal to 1/2 of 1% of the aggregate bonded indebtedness outstanding on the preceding November 30 and May 31, respectively. Bonds of any series may be used to satisfy this requirement.

Sinking fund requirements due in 1979 for bonds outstanding at December 31, 1978 amount to \$35,000,000. This amount, less treasury bonds of \$29,052,000 plus Series M Bonds of \$66,973,000 maturing on December 1, 1979 is included in current liabilities.

The combined aggregate amount of bonds maturing

and sinking fund requirements for the years 1979 through 1983, calculated on the basis of bonds outstanding at December 31, 1978, will amount to \$101,973,000; \$85,498,000; \$54,280,000; \$246,115,000; and \$101,815,000, respectively.

### Note 3

#### Taxes on Income

Taxes on income generally reflect amounts currently payable with the exception of investment tax credits and adjustments to balancing accounts. Investment tax credits reduce federal income tax expense through the use of a five-year moving average. Costs of electric energy and costs of gas sold are deductible on federal and state income tax returns in the year such costs are incurred and revenues are taxable in the year they are billed to customers. (See Note 1)

The net unbilled amount included in the balancing accounts at December 31, 1978 was approximately \$99,000,000 which will result in an additional tax payment of approximately \$52,000,000 when billed.

The reasons for the differences between the reported income tax expense and the amount computed by applying the U.S. federal income tax rate of 48% to income before taxes are as follows:

	1978	1977
	Percent of Pretax Income	Percent of Pretax Income
Computed provision	48.0%	48.0%
Increases (reductions) resulting from:		
Investment tax credits	(5.7)	(5.8)
State tax on income	2.6	1.9
Allowance for borrowed and equity funds used during construction	(13.2)	(11.9)
Tax depreciation in excess of book depreciation	(4.1)	(5.0)
Other overhead construction costs	(3.4)	(3.8)
Repair allowance	(3.3)	(2.4)
Property taxes	3.0	(2.1)
Property removal expenses	(1.1)	(1.4)
Other, net	(2.2)	(2.4)
<b>Total</b>	<b>20.6%</b>	<b>15.3%</b>

Income tax expense is included in the financial statements as follows:

	1978	1977
	Thousands	
Included in operating expenses:		
Tax on operating income	\$132,065	\$79,509
Amortization of deferred taxes on defense facilities	(2,945)	(2,945)
<b>Total</b>	<b>129,120</b>	<b>76,564</b>
Included in other income:		
<b>Total</b>	<b>\$104,348</b>	<b>\$64,917</b>

The components of income tax expense are:

	1978	1977
	Thousands	
Current:		
Federal	\$10,924	8,284
State	41,001	17,780
Deferred:		
Tax related to changes in regulatory balancing accounts:		
Federal	(40,207)	5,286
State	(15,773)	(185)
Investment tax credit:		
Federal	17,348	9,745
Amortization of deferred taxes on defense facilities:		
Federal	(2,694)	(2,694)
State	(251)	(251)
Total	\$104,348	\$84,512

#### Note 4

##### Compensating Balances and Short-Term Borrowing Arrangements

Lines of credit for loans were maintained with sixteen banks at December 31, 1978, the unused portion of which was \$328,500,000.

The Company compensates banks for lines of credit and other banking services by fee payments or by maintaining cash balances. The cash balances maintained at the banks are not legally restricted.

As of December 31, 1978 and December 31, 1977, there were \$38,990,000 and \$97,628,000 of the Company's commercial paper outstanding at average interest rates of 10.2% and 6.7%, respectively. The maximum amount of aggregate short-term borrowings outstanding at any month-end during the years 1978 and 1977 was \$104,400,000 and \$317,316,000, respectively.

During the years 1978 and 1977, the approximate weighted average interest rates for short-term borrowings were 7.7% and 5.2%, respectively, and the approximate average short-term borrowings outstanding were \$49,708,000 and \$146,082,000, respectively. These weighted average interest rates were computed on a daily basis, weighted for the amounts borrowed at each rate.

The usual terms of short-term borrowings are 90 days for bank loans and 10- to 90 days for commercial paper.

#### Note 5

##### Allowance For Funds Used During Construction (ADC)

The Uniform System of Accounts of the FERC and the CPUC provide a procedure, utilizing an Allowance for Funds Used During Construction, for capitalizing the costs

of financing new utility plant while it is under construction. Although ADC in the Statements of Income does not represent current cash earnings, ADC becomes a part of utility plant and is recovered in future periods from ratepayers as a cost of service through the provision for depreciation. In addition to ADC shown separately on the Statements of Income, equity earnings of subsidiaries include ADC of \$14,185,000 and \$8,950,000 for 1978 and 1977, respectively.

#### Note 6

##### Commitments and Other Matters

Capital expenditures for the year 1979 are estimated at \$900,000,000.

Total research and development costs incurred during the years 1978 and 1977 were approximately \$60,000,000 and \$50,000,000, of which \$47,000,000 and \$38,000,000 were capitalized as part of the cost of construction projects.

The Company provides retirement and savings fund plans for substantially all employees. The costs of these plans, charged to expense and utility plant, were

\$70,393,000 and \$67,258,000 for the years 1978 and 1977.

Alberta and Southern Gas Co. Ltd. (A&S), a wholly owned subsidiary of the Company, has as its principal functions the acquiring of natural gas in Canada and providing for its transportation to the United States border. A&S loaned funds for the exploration and development of natural gas reserves in Canada and has made advances based on proven reserves. Such loans, in Canadian dollars, amount to approximately \$46,000,000 as of December 31, 1978, and are subject to repayment without regard to the success of the exploration and development efforts.

Approximately \$47,000,000 of these loans are scheduled to be repaid starting July 1979. Other advances of approximately \$6,000,000 are refundable out of production. To finance this program, A&S has borrowed, as of December 31, 1978, approximately \$52,000,000 from Canadian banks.

The Company on April 28, 1976, executed guarantees of all such loans up to a maximum of \$100,000,000. On August 3, 1978, the Company executed amendments to those guarantees reducing the maximum amount to \$74,000,000. Interest on these loans has been allowed as one of the costs of service deductible from the Canadian regulated price of gas purchased by A&S.

With CPUC authorization, the Company has executed guarantees to assume liabilities not to exceed \$200,000,000 in aggregate principal amount on take-or-pay gas purchase promissory notes and a standby bank line of credit of A&S. At December 31, 1978, the amount of promissory notes outstanding guaranteed by the Company was approximately \$34,000,000 in Canadian dollars.



NOTE

Segment Information

Segment Information for 1978 and 1977 is as follows:

	Thousands			Total Company
	Electric	Gas	Intersegment Eliminations	
Operating Revenues	\$2,096,933	\$1,336,299		\$3,433,232
Intersegment Sales (A)	3,774	305,088	\$(308,862)	-
<b>Total Operating Revenues</b>	<b>2,100,707</b>	<b>1,641,387</b>	<b>(308,862)</b>	<b>3,433,232</b>
Depreciation	167,014	53,091		220,105
Income Taxes (B)	104,346	24,774		129,120
Other Operating Expenses (B)	1,461,448	1,478,423	(308,862)	2,631,009
<b>Total Operating Expenses</b>	<b>1,732,808</b>	<b>1,556,288</b>	<b>(308,862)</b>	<b>2,980,234</b>
<b>Operating Income</b>	<b>\$ 367,899</b>	<b>\$ 85,099</b>	<b>\$ -</b>	<b>\$ 452,998</b>
Capital Expenditures (C)	\$ 718,572	\$ 89,424		\$ 807,996
Utility Assets (C)	\$4,636,783	\$1,649,798		\$6,286,581
Construction Work in Progress (C)	2,008,144	30,842		2,038,986
Investments in Subsidiaries	-	176,505		176,505
<b>Total Assets</b>	<b>\$6,644,927</b>	<b>\$1,857,145</b>		<b>\$8,502,072</b>

	Thousands			Total Company
	Electric	Gas	Intersegment Eliminations	
Operating Revenues	\$2,355,133	\$1,145,648		\$3,500,781
Intersegment Sales (A)	3,163	507,748	\$(510,911)	-
<b>Total Operating Revenues</b>	<b>2,358,296</b>	<b>1,653,396</b>	<b>(510,911)</b>	<b>3,500,781</b>
Depreciation	158,341	50,886		209,227
Income Taxes (B)	49,057	27,507		76,564
Other Operating Expenses (B)	1,810,046	1,471,642	(510,911)	2,770,777
<b>Total Operating Expenses</b>	<b>2,017,444</b>	<b>1,550,035</b>	<b>(510,911)</b>	<b>3,056,568</b>
<b>Operating Income</b>	<b>\$ 340,852</b>	<b>\$ 103,361</b>	<b>\$ -</b>	<b>\$ 444,213</b>
Capital Expenditures (C)	\$ 599,126	\$ 91,198		\$ 690,324
Utility Assets (C)	\$4,783,644	\$1,397,245		\$6,180,889
Construction Work in Progress (C)	1,657,912	32,391		1,690,303
Investments in Subsidiaries	-	126,821		126,821
<b>Total Assets</b>	<b>\$6,441,556</b>	<b>\$1,556,457</b>		<b>\$7,998,013</b>

(A) Intersegment sales for 1978 and 1977 represent 19% and 31%, respectively, of Total Gas Revenues and less than 1% of Total Electric Revenues. Intersegment Electric and Gas Sales are accounted for at tariff rates prescribed by the CPUC.

(B) Income taxes and general corporate expenses are allocated to departments in accordance with the Uniform System of Accounts and requirements of the CPUC.

(C) Includes allocation of Common Utility Plant.

**NOTE**

**Quarterly Financial Data (Unaudited)**

Operating revenues, operating income, net income and earnings per common share for the four quarters of 1978 and 1977 are shown in the table below. Due to the seasonal nature of the utility business, the annual amounts are not generated evenly by quarter during the year.

Quarter Ended	Operating Revenues	Operating Income	Net Income	Earnings Per Common Share
Thousands				
December 31, 1978	\$1,040,705	\$127,838	\$118,861	\$96
September 30, 1978	\$ 849,569	\$126,161	\$115,795	\$94
June 30, 1978	\$ 740,174	\$104,514	\$ 89,170	\$70
March 31, 1978	\$ 802,784	\$ 94,485	\$ 77,758	\$60
December 31, 1977	\$ 894,020	\$103,272	\$ 84,954	\$73
September 30, 1977	\$ 862,838	\$120,320	\$ 98,118	\$88
June 30, 1977	\$ 810,887	\$109,068	\$ 86,982	\$76
March 31, 1977	\$ 932,986	\$111,553	\$ 86,244	\$78

For the quarters ended March 31, 1977 through June 30, 1978 operating revenues and operating expenses have been changed from the amounts previously reported due to reclassification of all balancing account activity to operating revenues. Operating income and net income were unaffected by this reclassification.

Operating revenues were increased (decreased) as follows:

Quarter Ended	Increase (Decrease)
Thousands	
June 30, 1978	\$ (101,861)
March 31, 1978	\$ (114,124)
December 31, 1977	\$ (52,791)
September 30, 1977	\$ (48,174)
June 30, 1977	\$ 7,788
March 31, 1977	\$ 88,409

**NOTE**

**Replacement Cost (Unaudited)**

The Securities and Exchange Commission (SEC) requires that the Company disclose in financial statements filed with the SEC the estimated current "replacement cost" of certain of its assets, accumulated replacement cost depreciation applicable to those assets, and the amount of depreciation based on "replacement costs." There is considerable controversy over the usefulness of such information in assessing the current economics of companies in an inflationary economy. The Company believes that the calculations necessary to provide the estimated "replacement cost" as required by the SEC are not appropriate in determining the impact of inflation on regulated utilities

such as the Company. The Company's operations, including substantially all of its revenues, are subject to regulation by the CPUC. It is the practice of the CPUC to authorize rates at a level to allow the Company to recover its actual investment in facilities used in providing utility service. Therefore, when facilities are replaced at costs higher than the cost of existing facilities, rates can be changed to cover any changes in depreciation and other costs including the return on any additional investment required. The impact on earnings, therefore, can reasonably be expected to be zero.

The SEC requires that this annual report refer to the replacement cost information contained in the Company's 10-K report for 1978. A copy of that report may be obtained upon written request to the Corporate Secretary.

**OPINION OF THE FIRM**

The Stockholders and the Board of Directors of Pacific Gas and Electric Company

We have examined the balance sheets of Pacific Gas and Electric Company as of December 31, 1978 and 1977 and the related statements of income, changes in financial position and stockholders' equity for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, such financial statements present fairly the financial position of the Company at December 31, 1978 and 1977 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

*Deloitte Haskins & Sells*

San Francisco, California  
February 9, 1979

**Electric Operations**

Managers:  
W. H. Barr, Steam Generation  
W. A. Flowers,  
Hydro Generation  
D. H. Colwell,  
System Protection  
T. R. Ferry, Communications  
E. F. Kaprielian, Power Control  
F. C. Buchholz, Transmission  
and Distribution  
J. N. Ylarraz, Substations

**Gas Operations**

Managers:  
J. B. Stoutamore,  
Gas Distribution  
P. C. Heilmann, Gas Utilization  
L. C. Odom,  
Gas System Planning  
F. J. Parsons, Gas Control  
C. J. Tateosian,  
Gas System Design  
W. E. Ross,  
Natural Gas Production  
C. A. Miller,  
Pipeline Operations

**Gas Supply**

Managers:  
H. G. Culp,  
Contract Administration  
D. E. Fissell, Exploration,  
Pacific Region  
J. K. A. Harral, Gas Resources  
J. M. Kunz, Gas Procurement  
D. L. McLeod, Gas Purchase  
J. L. Wroble, Exploration,  
Rocky Mountain Region

**LNG Companies**

K. L. C. Dorking, General  
Manager

**Coal Supply**

J. C. Osmond, Manager

**Engineering**

Chiefs:  
G. H. Aster, Design-Drafting  
R. V. Hettinger, Civil Engineer  
W. R. Johnson,  
Electrical Engineer  
D. V. Kelly, Mechanical and  
Nuclear Engineer  
J. J. McCann,  
Engineering Services  
G. V. Richards, Engineering  
Quality Control  
J. O. Schuyler, Nuclear Project  
Engineer

**Customer Operations**

Managers:  
J. S. Cooper, Energy  
Conservation and Services  
J. G. O'Neill,  
Customer Services  
J. M. Stearns, Commercial

**Geysers Project**

R. P. Wischow, Manager

**Internal Auditing**

E. C. Suess, Manager

**Planning and Research**

Chiefs:  
R. F. Cayot,  
Engineering Research  
E. E. Hall, Siting Engineer  
H. R. Perry, Planning Engineer

**Rates and Valuation**

Managers:  
S. M. Andrew, Economics and  
Statistics  
H. E. Crowhurst, Jr., Valuation  
L. R. Gardner, Rate

**Comptroller**

J. W. Hall,  
Assistant Comptroller  
K. S. Taylor,  
Assistant Comptroller

**Managers:**

R. W. Beck,  
Corporate Accounting  
A. W. Defoe, Disbursement  
Accounting  
H. W. Gleason, Income Tax  
N. D. Hennings,  
Plant Accounting  
R. E. Palmer, Property Tax  
E. M. Schroeder, Customer  
Accounting

**Law**

M. H. Furbush, Associate  
General Counsel  
Assistant General Counsel:  
C. T. Van Deusen  
P. A. Crane, Jr.  
H. J. LaPlante  
R. A. Clarke  
J. B. Gibson  
A. L. Hillman, Jr.  
R. Ohlbach  
C. W. Thissell

**Computer Systems and  
Services**

G. A. Maneatis, Manager

**Stock Transfer**

W. Roby, Manager

**Insurance**

W. P. Noone, Manager

**Treasurer**

Managers:  
W. M. Cracknell, Credit and  
Collection  
J. F. Helms, Financial Planning  
and Analysis  
G. E. Lavering, Banking and  
Money Management

**Personnel and General  
Services**

Managers:  
L. J. Abell, Automotive and  
Equipment  
R. H. Cunningham, Personnel  
Relations  
L. W. Bonbright, Industrial  
Relations  
J. W. Page, Land

**General Construction**

Managers:  
R. S. Bain, Station Construction  
L. C. Beanland, General  
Construction Personnel  
W. Funabiki, Gas Construction  
R. F. Irons, General  
Construction Services  
W. M. Stubblefield, Line  
Construction  
G. S. Bates, Civil-Hydro  
Construction

**Safety, Health and Claims**

R. W. White, Manager

**Materials**

R. P. Benton, Manager

**Public Relations**

Managers:  
D. J. Baxter, Public Information  
R. H. Miller, Advertising  
R. L. Sawyer, Public Activities

**Government Relations**

G. A. Blanc, Assistant to the  
President  
R. B. Dewey, Assistant to the  
Chairman of the Board  
K. J. Diercks, Manager,  
Governmental and  
Public Affairs  
J. A. Fraser, Executive  
Representative

**DIVISION MANAGERS**

**Coast Valleys**

F. C. Marks, Salinas

**Colgate**

J. L. Kirkegaard, Marysville

**De-Sabla**

R. D. Mullikin, Chico

**Drum**

R. E. Metzker, Auburn

**East Bay**

G. F. Clifton, Jr., Oakland

**Humboldt**

R. C. Atkins, Eureka

**North Bay**

R. A. Draeger, San Rafael

**Sacramento**

S. E. Howatt, Sacramento

**San Francisco**

J. A. Fairchild, San Francisco

**San Joaquin**

G. N. Radford, Fresno

**San Jose**

V. H. Lind, San Jose

**Shasta**

R. J. LaRue, Red Bluff

**Stockton**

C. R. Martin, Stockton

**Directors**

**John F. Bonner**<sup>1, 4</sup>  
President and  
Chief Executive Officer

**Ransom M. Cook**<sup>3</sup>  
Consultant, Systron-Donner  
Corporation  
(electronic equipment)

**Richard P. Cooley**<sup>3, 4</sup>  
Chairman of the Board and  
Chief Executive Officer,  
Wells Fargo Bank, N.A.

**Charles de Bretteville**<sup>1</sup>  
Former Chairman of  
the Board, The Bank of  
California, N.A.

**Myron Du Bain**<sup>3</sup>  
Chairman of the Board,  
President and Chief  
Executive Officer,  
Fireman's Fund Insurance  
Companies

**Alfred W. Eames, Jr.**<sup>1</sup>  
Former Chairman of the  
Board, Del Monte Corporation  
(food products and related  
services)

**James M. Hait**<sup>2</sup>  
Consultant, FMC Corporation  
(food machinery and  
chemicals)

**Doris F. Leonard**<sup>2, 4</sup>  
Secretary-Treasurer  
and Partner, Conservation  
Associates  
(park and land acquisition)

**Richard B. Madden**<sup>2</sup>  
Chairman of the Board and  
Chief Executive Officer,  
Potlatch Corporation  
(diversified forest products)

**Frederick W. Mielke, Jr.**  
Executive Vice President

**Mervin G. Morris**<sup>3</sup>  
Chairman of the Board and  
Chief Executive Officer,  
Mervyn's  
(department stores)

**Leon S. Peters**<sup>1</sup>  
President, Valley Foundry  
& Machine Works  
(manufacturer of winery  
equipment)

**Richard H. Peterson**<sup>1</sup>  
Chairman of the Board

**Porter Sesnon**<sup>2</sup>  
General Partner,  
Porter Estate Company  
(farming, livestock, oil and  
gas production)

**Barton W. Shackelford**  
Executive Vice President

**Emmett G. Solomon**<sup>1, 4</sup>  
Former Chairman of  
the Board, Crocker  
National Bank

**John Lyons Sullivan**<sup>2, 4</sup>  
Rancher, Chairman  
of the Board, California  
Canners and Growers  
(cooperative canner of  
fruits and vegetables)

- 1. Member Executive Committee
- 2. Member Audit Committee  
James M. Hait, Chairman
- 3. Member Compensation  
Committee  
Ransom M. Cook, Chairman
- 4. Member Advisory Nominating  
Committee  
John F. Bonner, Chairman

**Officers**

**John F. Bonner**  
President and  
Chief Executive Officer

**Richard H. Peterson**  
Chairman of the Board

**Frederick W. Mielke, Jr.**  
Executive Vice President

**Barton W. Shackelford**  
Executive Vice President

**Stanley T. Skinner**  
Executive Vice President

**John A. Sproul**  
Executive Vice President

**J. Dean Worthington**  
Executive Vice President

**Donald A. Brand**  
Vice President,  
General Construction

**Howard P. Braun**  
Vice President,  
Electric Operations

**Robert W. Brooks**  
Vice President,  
Gas Supply

**Nolan H. Daines**  
Vice President,  
Planning and Research

**Joseph Y. DeYoung**  
Vice President,  
Customer Operations

**William M. Gallavan**  
Vice President,  
Rates and Valuation

**Ellis B. Langley, Jr.**  
Vice President,  
Division Operations

**Malcolm A. MacKillop**  
Vice President,  
Governmental Relations

**Ferdinand F. Mautz**  
Vice President,  
Engineering

**Lawrence R. McDonnell**  
Vice President,  
Public Relations

**Howard M. McKinley**  
Vice President,  
Gas Operations

**Richard K. Miller**  
Vice President,  
Personnel and General  
Services

**John C. Morrissey**  
Vice President  
and General Counsel

**Frank A. Peter**  
Vice President and  
Comptroller

**James T. Doudiet**  
Treasurer

**John F. Taylor**  
Secretary

**Anthony J. Duffy**  
Assistant Treasurer

**Gary E. Lavinger**  
Assistant Treasurer

**David B. Allison**  
Assistant Secretary

**Brian L. McGrath**  
Assistant Secretary

**Stockholders' Calendar**  
Schedule of Dividend  
Payment Dates-1979

**Common Stock**

January 15

April 16

July 16

October 15

**Preferred Stock**

February 15

May 15

August 15

November 15

**Stock Exchange Listings**

Common stock of the Company is listed on the New York and Pacific Stock Exchanges. Preferred stocks of the Company are listed on the American and Pacific Stock Exchanges.

**Annual Meeting**

The Management will solicit proxies for the annual meeting to be held at the Masonic Auditorium, 1111 California Street, San Francisco, California, on Wednesday, April 18, 1979 at 2:00 p.m. In connection with such solicitation, it is expected that the proxy statement and form of proxy will be mailed to stockholders on or about March 12, 1979.

**Stock Transfer Agent**  
Office of the Company  
(W. Roby, Transfer Agent),  
San Francisco

**Registrar of Stock**  
Wells Fargo Bank, N.A.,  
San Francisco

**Executive Office**  
Pacific Gas and Electric  
Company, 77 Beale Street,  
San Francisco, California  
94106

**Annual Report for 1978  
on Form 10-K**

A copy of the Company's report for 1978 filed with the Securities and Exchange Commission on Form 10-K will be provided to stockholders upon written request to the Corporate Secretary at the above address.

Pacific Gas and Electric Company  
77 Beale Street  
San Francisco CA 94106